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**Water Resources Data for Massachusetts, New Hampshire,
Rhode Island, and Vermont, Water Year 1972. Part 1
Surface Water Records. Part 2. Water Quality Records**

(U.S.) Geological Survey, Boston, MA. Water Resources Div.

1973

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Water Resources Data for

Massachusetts
New Hampshire
Rhode Island
Vermont

Water Year 1972

Part 1. Surface Water Records

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY WATER DATA REPORT MAMHRIVT-72-1

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Prepared in cooperation with the States of Massachusetts, New Hampshire,
Rhode Island, and Vermont and with other agencies

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Ia

Prepared in cooperation with

Massachusetts Water Resources Commission
Massachusetts Department of Public Works
Massachusetts Metropolitan District Commission
New Hampshire Water Resources Board
Rhode Island Department of Natural Resources
Rhode Island Department of Transportation
Rhode Island Water Resources Board
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CONTENTS

	Page
List of surface-water stations, in downstream order, for which records are published	IV
List of water-quality stations, in downstream order, for which records are published	X
Introduction	1
Cooperation	1
Definition of terms	2
Special networks and programs	5
Downstream order and station number	5
Well number	5
Explanation of surface-water data	6
Collection and computation of data	6
Accuracy of data	8
Publications	8
Other data available	9
Explanation of water-quality data	9
Collection and examination of data	9
Solutes	10
Temperature	10
Sediment	11
Publications	11
Hydrologic conditions	11
Selected references	13
Part 1. Surface-water records	16
Gaging-station records	16
Discharge at partial-record stations and miscellaneous sites	249
Low-flow partial-record stations	249
Crest-stage partial-record stations	253
Measurements at miscellaneous sites	258
Part 2. Water-quality records	263
Water-quality-station records	263
Analyses of samples collected at partial-record stations	364
Chemical analyses	364
Radiochemical analyses	368
Chemical analyses, pesticides	370
Supplemental chemical analyses	374
Chemical analyses of composited samples	376
Instantaneous suspended sediment	378
Analyses of samples collected at miscellaneous sites	383
Chemical analyses	383
Chemical analyses of ground water	386
Chemical analyses of precipitation	388
Index	389

ILLUSTRATIONS

Figure 1. Comparison of discharge at three long-term index gaging stations during 1972 water year with median discharge for period 1941-70	12
Figure 1. Map showing location of gaging stations and water-quality stations	At back of book
	III

NORTH ATLANTIC SLOPE BASINS

ANDROSCOGGIN RIVER BASIN

Androscoggin River:

Umbagog Lake:

Magalloway River:

Diamond River near Wentworth Location, N.H.	16
Androscoggin River at Errol, N.H.	17
Androscoggin River near Gorham, N.H.	18

SACO RIVER BASIN

Saco River:

Ellis River near Jackson, N.H.	19
Lucy Brook near North Conway, N.H.	20
Saco River near Conway, N.H.	21
Bearcamp River (head of Ossipee River):	
Cold Brook at South Tamworth, N.H.	22
Ossipee River at Effingham Falls, N.H.	23

PISCATAQUA RIVER BASIN

Salmon Falls River (head of Piscataqua River) at Milton, N.H.	24
--	----

Piscataqua River:

Cocheco River:

Isinglass River:

Mohawk Brook near Center Strafford, N.H.	25
Oyster River near Durham, N.H.	26
Lamprey River near Newmarket, N.H.	27

Squamscott River:

Little River:

Dudley Brook near Exeter, N.H.	28
-------------------------------------	----

MERRIMACK RIVER BASIN

Pemigewasset River (head of Merrimack River) at Woodstock, N.H.	29
--	----

Baker River:

Stevens Brook near Wentworth, N.H.	30
Baker River near Rumney, N.H.	31
Pemigewasset River at Plymouth, N.H.	32
Squam River at Ashland, N.H.	33
Smith River near Bristol, N.H.	34
Lake Winnepesaukee at Weirs Beach, N.H.	35
Lake Winnepesaukee Outlet at Lakeport, N.H.	36
Winnepesaukee River at Tilton, N.H.	37
Merrimack River at Franklin Junction, N.H.	38
Contoocook River at Peterborough, N.H.	39
Nubanusit Brook near Peterborough, N.H.	40
Contoocook River near Henniker, N.H.	41
Contoocook River below Hopkinton Dam, at West Hopkinton, N.H.	42
West Branch Warner River near Bradford, N.H.	43
Warner River at Davisville, N.H.	44
Blackwater River near Webster, N.H.	45
Contoocook River at Penacook, N.H.	46
Soucook River near Concord, N.H.	47
Piscataquog River below Everett Dam, near East Weare, N.H.	48
South Branch Piscataquog River near Goffstown, N.H.	49
Piscataquog River near Goffstown, N.H.	50
Merrimack River near Goffs Falls, below Manchester, N.H.	51

Souhegan River:

Stony Brook:

Stony Brook tributary near Temple, N.H.	52
Souhegan River at Merrimack, N.H.	53

NORTH ATLANTIC SLOPE BASINS--Continued

MERRIMACK RIVER BASIN--Continued

Merrimack River--Continued

North Nashua River (head of Nashua River) near Leominster, Mass.	Page 54
Nashua River:	
South Branch Nashua River at Clinton, Mass.	55
Squannacook River near West Groton, Mass.	56
Nashua River at East Pepperell, Mass.	57
Assabet River (head of Concord River):	
Elizabeth Brook:	
Great Brook:	
Boulder Brook at East Bolton, Mass.	58
Assabet River at Maynard, Mass.	60
Fort Pond Brook:	
Nashoba Brook near Acton, Mass.	61
Sudbury River at Framingham Center, Mass.	62
Concord River below River Meadow Brook, at Lowell, Mass.	63
Merrimack River below Concord River, at Lowell, Mass.	64
Shawsheen River near Wilmington, Mass.	65
East Meadow River near Haverhill, Mass.	66
Reservoirs in Merrimack River basin	67
PARKER RIVER BASIN	
Parker River at Byfield, Mass.	68
IPSWICH RIVER BASIN	
Ipswich River:	
Maple Meadow Brook at Wilmington, Mass.	69
Ipswich River at South Middleton, Mass.	70
Ipswich River near Ipswich, Mass.	71
MYSTIC RIVER BASIN	
Aberjona River (head of Mystic River) at Winchester, Mass.	72
CHARLES RIVER BASIN	
Charles River at Charles River Village, Mass.	73
Mather Brook at Dedham, Mass.	74
Charles River at Wellesley, Mass.	75
Charles River at Waltham, Mass.	76
NEPONSET RIVER BASIN	
Neponset River at Norwood, Mass.	77
East Branch Neponset River at Canton, Mass.	78
WEYMOUTH BACK RIVER BASIN	
Whitmans Pond (head of Weymouth Back River):	
Old Swamp River near South Weymouth, Mass.	79
NORTH RIVER BASIN	
Indian Head River (head of North River) at Hanover, Mass.	80
JONES RIVER BASIN	
Jones River at Kingston, Mass.	81
HERRING RIVER BASIN	
Herring River at North Harwich, Mass.	82
WEST BRANCH WESTPORT RIVER BASIN	
Adamsville Brook (head of West Branch Westport River) at Adamsville, R. I.	83
TAUNTON RIVER BASIN	
Matfield River (head of Taunton River):	
Dorchester Brook (head of Town River) near Brockton, Mass.	84
Taunton River at State Farm, near Bridgewater, Mass.	85
Wading River (head of Threemile River) at West Mansfield, Mass.	86
Wading River near Norton, Mass.	87
Threemile River at North Dighton, Mass.	88
Segreganset River near Dighton, Mass.	89

NORTH ATLANTIC SLOPE BASINS--Continued

PALMER RIVER BASIN

Palmer River: Page

West Branch Palmer River near Rehoboth, Mass. 90

BLACKSTONE RIVER BASIN

Kettle Brook (head of Blackstone River) at Worcester, Mass. 91

Quinsigamond River at North Grafton, Mass. 92

Blackstone River at Northbridge, Mass. 93

West River below West Hill Dam, near Uxbridge, Mass. 94

Clear River (head of Branch River):

Nipmuc River near Harrisville, R.I. 95

Branch River:

Chepachet River at Chepachet, R.I. 96

Branch River at Forestdale, R.I. 97

Blackstone River at Woonsocket, R.I. 98

Blackstone River tributary at Woonsocket, R.I. 99

MOSHASSUCK RIVER BASIN

Moshassuck River at Providence, R.I. 100

WOONASQUATUCKET RIVER BASIN

Woonasquatucket River at Centerdale, R.I. 101

PAWTUXET RIVER BASIN

Scituate Reservoir (head of Pawtuxet River):

Huntinghouse Brook:

Mosquitohawk Brook near North Scituate, R.I. 102

Pawtuxet River:

Nooseneck River (head of South Branch Pawtuxet River) at Nooseneck, R.I. 103

Big River (continuation of Nooseneck River):

Carr River near Nooseneck, R.I. 104

South Branch Pawtuxet River at Washington, R.I. 105

Meshanticut Brook:

Furnace Hill Brook at Cranston, R.I. 106

Pawtuxet River at Cranston, R.I. 107

POTOWOMUT RIVER BASIN

Potowomut River near East Greenwich, R.I. 108

PAWCATUCK RIVER BASIN

Pawcatuck River at Wood River Junction, R.I. 109

Meadow Brook near Carolina, R.I. 110

Wood River near Arcadia, R.I. 111

Wood River at Hope Valley, R.I. 112

Pawcatuck River at Westerly, R.I. 113

THAMES RIVER BASIN

Shetucket River (head of Thames River):

Quinebaug River below Westville Dam, near Southbridge, Mass. 114

Quinebaug River at Quinebaug, Conn. 115

French River below Hodges Village Dam, at Hodges Village, Mass. 116

Little River at Buffumville, Mass. 117

Lake Chaubunagungamaug (head of Mill Brook):

Browns Brook near Webster, Mass. 118

French River at Webster, Mass. 119

Moosup River:

Bucks Horn Brook at Greene, R.I. 120

Reservoirs in Thames River basin 121

CONNECTICUT RIVER BASIN

Connecticut River:

Big Brook near Pittsburg, N.H. 122

Connecticut River at First Connecticut Lake, near Pittsburg, N.H. 123

Connecticut River below Indian Stream, near Pittsburg, N.H. 124

NORTH ATLANTIC SLOPE BASINS--Continued

CONNECTICUT RIVER BASIN--Continued

Connecticut River--Continued	Page
Halls Stream near East Hereford, Quebec	125
Connecticut River at North Stratford, N.H.	126
Upper Ammonoosuc River near Groveton, N.H.	127
Connecticut River near Dalton, N.H.	128
East Branch Passumpsic River near East Haven, Vt.	129
Passumpsic River:	
Moose River at Victory, Vt.	130
Kirby Brook at Concord, Vt.	131
Moose River at St. Johnsbury, Vt.	132
Passumpsic River at Passumpsic, Vt.	133
Ammonoosuc River at Bethlehem Junction, N.H.	134
Ammonoosuc River near Bath, N.H.	135
Connecticut River at Wells River, Vt.	136
Wells River at Wells River, Vt.	137
Waits River:	
East Orange Branch at East Orange, Vt.	138
Ompompanoosuc River at Union Village, Vt.	139
Mink Brook near Etna, N.H.	140
White River:	
Third Branch White River:	
Ayers Brook at Randolph, Vt.	141
White River at West Hartford, Vt.	142
Connecticut River at White River Junction, Vt.	143
Mascoma River at West Canaan, N.H.	144
Mascoma River at Mascoma, N.H.	145
Ottawaquechee River:	
Kent Brook near Sherburne, Vt.	146
Ottawaquechee River at North Hartland, Vt.	147
Sugar River at West Claremont, N.H.	148
Black River at North Springfield, Vt.	149
Williams River at Brockways Mills, Vt.	150
Saxtons River at Saxtons River, Vt.	151
Connecticut River at North Walpole, N.H.	152
Cold River at Drewsville, N.H.	153
Sacketts Brook near Putney, Vt.	154
West River:	
Flood Brook near Londonderry, Vt.	155
West River at Jamaica, Vt.	156
West River at Newfane, Vt.	157
Connecticut River at Vernon, Vt.	158
Ashuelot River near Gilsum, N.H.	159
Ashuelot River below Surry Mountain Dam, near Keene, N.H.	160
Otter Brook (head of The Branch) below Otter Brook Dam, near Keene, N.H.	161
South Branch Ashuelot River at Webb, near Marlborough, N.H.	162
Ashuelot River at Hinsdale, N.H.	163
Millers River:	
Tarbell Brook near Winchendon, Mass.	164
Millers River near Winchendon, Mass.	165
Priest Brook near Winchendon, Mass.	166
Otter River at Otter River, Mass.	167
Millers River at South Royalston, Mass.	168
East Branch Tully River near Athol, Mass.	169
Lake Rohunta Outlet near Athol, Mass.	170
Mass Brook at Wendell Depot, Mass.	171

NORTH ATLANTIC SLOPE BASINS--Continued

CONNECTICUT RIVER BASIN--Continued

	Page
Connecticut River--Continued	
Millers River at Erving, Mass.	172
Connecticut River at Turners Falls, Mass.	173
Deerfield River:	
South Branch Deerfield River:	
Beaver Brook at Wilmington, Vt.	174
Deerfield River at Charlemont, Mass.	176
North River at Shattuckville, Mass.	177
South River near Conway, Mass.	178
Deerfield River near West Deerfield, Mass.	179
Green River near Colrain, Mass.	180
Connecticut River at Montague City, Mass.	181
Fort River near Amherst, Mass.	182
Mill River at Northampton, Mass.	183
Manhan River:	
Bassett Brook near Northampton, Mass.	184
Ware River (head of Chicopee River) near Barre, Mass.	185
Ware River at Coldbrook, Mass.	186
Moose Brook near Barre, Mass.	187
Ware River at Gibbs Crossing, Mass.	188
Quabbin Reservoir (head of Swift River):	
Hop Brook near New Salem, Mass.	189
East Branch Swift River near Hardwick, Mass.	190
Cadwell Creek near Pelham, Mass.	191
Cadwell Creek near Belchertown, Mass.	192
Swift River at West Ware, Mass.	193
Sevenmile River (head of Quaboag River) near Spencer, Mass.	194
Quaboag River at West Brimfield, Mass.	195
Chicopee River at Indian Orchard, Mass.	196
Westfield River at Knightville, Mass.	197
Sykes Brook at Knightville, Mass.	198
Middle Branch Westfield River at Gass Heights, Mass.	199
West Branch Westfield River:	
Walker Brook near Becket Center, Mass.	200
West Branch Westfield River at Huntington, Mass.	201
Westfield Little River at outlet of Cobble Mountain Reservoir, near Westfield, Mass.	202
Westfield River near Westfield, Mass.	203
Connecticut River at Thompsonville, Conn.	204
West Branch Farmington River:	
Fall River below Otis Reservoir, near Otis, Mass.	205
West Branch Farmington River near New Boston, Mass.	206
Reservoirs in Connecticut River basin	207
HOUSATONIC RIVER BASIN	
East Branch Housatonic River at Coltsville, Mass.	209
Marsh Brook at Lenox, Mass.	210
Housatonic River near Great Barrington, Mass.	211
Schenob Brook near Sheffield, Mass.	212
Hubbard Brook:	
Willard Brook near Sheffield, Mass.	213
Hubbard Brook at Sheffield, Mass.	214
HUDSON RIVER BASIN	
Hudson River:	
Batten Kill at Arlington, Vt.	215
Hoosic River:	
Dry Brook near Adams, Mass.	216

NORTH ATLANTIC SLOPE BASINS--Continued

HUDSON RIVER BASIN--Continued

Hudson River--Continued	Page
Hoosic River at Adams, Mass.	217
North Branch Hoosic River at North Adams, Mass.	218
Hoosic River near Williamstown, Mass.	219
Green River at Williamstown, Mass.	220
Wallomsac River near North Bennington, Vt.	221

ST. LAWRENCE RIVER BASIN

St. Lawrence River:	
Lake Champlain (head of Richelieu River):	
Poultney River below Fair Haven, Vt.	222
Mettawee River:	
Mettawee River tributary near Pawlet, Vt.	223
Otter Creek:	
East Creek at Rutland, Vt.	224
Otter Creek at Center Rutland, Vt.	225
Otter Creek at Middlebury, Vt.	226
Lewis Creek:	
Lewis Creek tributary at Starksboro, Vt.	227
Winooski River:	
Stevens Branch:	
Jail Branch at East Barre, Vt.	228
North Branch Winooski River at Wrightsville, Vt.	229
Reservoirs in Winooski River basin above Montpelier, Vt.	230
Winooski River at Montpelier, Vt.	231
Dog River at Northfield Falls, Vt.	232
Sonny Brook near Montpelier, Vt.	233
Mad River near Moretown, Vt.	234
Waterbury Reservoir (head of Little River) near Waterbury, Vt.	235
Little River near Waterbury, Vt.	236
Winooski River near Essex Junction, Vt.	237
Lamoille River at Johnson, Vt.	238
Gihon River:	
Stony Brook near Eden, Vt.	239
Lamoille River at East Georgia, Vt.	240
Stone Bridge Brook near Georgia Plains, Vt.	241
Missisquoi River near North Troy, Vt.	242
Missisquoi River near Richford, Vt.	243
Lake Champlain at Burlington, Vt.	244
St. Francis River:	
Lake Memphremagog (head of Magog River) at Newport, Vt.	245
Black River at Coventry, Vt.	246
Barton River:	
Willoughby River:	
Brownington Branch near Evansville, Vt.	247
Clyde River at Newport, Vt.	248

WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

[Symbols after station name designate type of data: (c), chemical;
(t), water temperature; (s), sediment]

NORTH ATLANTIC SLOPE BASINS	
MERRIMACK RIVER BASIN	
Merrimack River:	
North Nashua River at North Village, Mass. (ct)	Page 263
Merrimack River above Lowell, Mass. (c)	270
Merrimack River above Concord River, at Lowell, Mass. (ct)	272
Assabet River (head of Concord River):	
Elizabeth Brook:	
Great Brook:	
Boulder Brook near East Bolton, Mass. (ct)	276
Boulder Brook at East Bolton, Mass. (ct)	281
Fort Pond Brook:	
Nashoba Brook near Acton, Mass. (ct)	286
Merrimack River below Concord River, at Lowell, Mass. (cs)	291
Merrimack River at West Newbury, Mass. (ct)	294
BLACKSTONE RIVER BASIN	
Blackstone River at Millville, Mass. (ct)	301
PAWTUXET RIVER BASIN	
Pawtuxet River at Cranston, R.I. (ct)	308
THAMES RIVER BASIN	
Shetucket River (head of Thames River):	
Quinebaug River near Dudley, Mass. (ct)	312
French River:	
Lake Chaubunagungamaug (head of Mill Brook):	
Browns Brook near Webster, Mass. (ct)	319
CONNECTICUT RIVER BASIN	
Connecticut River at Wilder, Vt. (c)	323
Ashuelot River:	
South Branch Ashuelot River at Webb, near Marlborough, N.H. (t)	325
Connecticut River at Northfield, Mass. (c)	327
Ware River (head of Chicopee River):	
Moose Brook near Barre, Mass. (ct)	329
Quabbin Reservoir (head of Swift River):	
Hop Brook near New Salem, Mass. (ct)	333
Connecticut River at West Springfield, Mass. (ct)	336
Westfield River:	
West Branch Westfield River:	
Walker Brook near Becket Center, Mass. (ct)	338
Westfield River at West Springfield, Mass. (ct)	343
Connecticut River at Agawam, Mass. (ct)	346
Connecticut River at Thompsonville, Conn. (ct)	353
HUDSON RIVER BASIN	
Hudson River:	
Hoosic River below Williamstown, Mass. (ct)	355
Hoosic River near North Pownal, Vt. (c)	363

WATER RESOURCES DATA FOR MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT, 1972

PART 1. SURFACE-WATER RECORDS PART 2. WATER-QUALITY RECORDS

INTRODUCTION

Water-resources data for the 1972 water year for Massachusetts, New Hampshire, Rhode Island, and Vermont, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface and ground water and precipitation, are given in this report. In Part 1, records are included for 226 gaging stations of which 220 are streamflow discharge stations and 6 are reservoir or lake stations; also included are records of monthend contents for 41 reservoirs, and records for 65 low-flow partial-record stations, 102 crest-stage partial-record stations, and 28 miscellaneous sites. In Part 2, records on quality of surface water (chemical, temperature, and sediment) are included for 23 continuous-record stations, 30 partial-record stations, and 3 miscellaneous sites. Records of chemical analyses also are given for 3 ground-water sites and 1 precipitation site. Locations of gaging and water-quality stations are shown in Figure 1. A few pertinent stations (not included above) in bordering States and Province of Quebec are also included in this report. The records were collected and computed by the Water Resources Division of the U. S. Geological Survey under the direction of C. E. Knox, district chief. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State and Federal agencies in Massachusetts, New Hampshire, Rhode Island, and Vermont.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State- or District-boundary basis. Water-quality records beginning with the 1964 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U. S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. Records of chemical quality, water temperatures, and suspended sediment have been published since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." More information is given under the headings "Publications" on pages 8, 9, and 11.

COOPERATION

The U. S. Geological Survey and organizations of the States of Massachusetts, New Hampshire, Rhode Island, and Vermont have had cooperative agreements for the systematic collection of streamflow records since 1909, and for water-quality records since 1954. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Massachusetts: State Water Resources Commission, A. W. Brownell, chairman, C. F. Kennedy, director and chief engineer of Division of Water Resources, and T. C. McMahon, director of Division of Water Pollution Control; State Department of Public Works, Bruce Campbell, commissioner, J. J. Lyons, research and materials engineer, succeeded by P. W. McHugh; and F. C. Schwelm, deputy chief engineer of Division of Waterways; Metropolitan District Commission, John Sears, commissioner, Allan Grieve, Jr., director and chief water-supply engineer of Water Division, and F. T. Bergin, chief engineer of Construction Division.

New Hampshire: State Water Resources Board, G. M. McGee, chairman.

Rhode Island: State Department of Natural Resources, E. C. Hayes, Jr., director, C. B. Dunwoody, chief of Division of Planning and Development; State Department of Transportation, F. J. Fazzano, director, Morris Chorney, executive director, F. H. Dutra, chief of highway planning division; State Water Resources Board, A. A. DiMartino, chairman; city of Providence, Department of Public Works, L. P. McGarry, director.

Vermont: State Department of Water Resources, M. L. Johnson, commissioner; State Department of Highways, J. T. Gray, commissioner.

Assistance in the form of funds or services was given by the Corps of Engineers, U. S. Army, in collecting records published herein for 44 gaging stations, and by the Environmental Protection Agency, for 10 water-quality stations.

Assistance in collecting records was also furnished by New England Power Co. and Green Mountain Power Corp.

Organizations that supplied data are acknowledged in station descriptions.

On waters adjacent to the international boundary, certain gaging stations are maintained by the United States (or Canada) under agreement with Canada (or the United States), and the records are obtained and compiled in a manner equally acceptable to both countries. These stations are designated as "international gaging stations."

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English Units to International System (SI) Units on page .

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet or 646,317 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds present in a water and will vary with water compositions, concentration or reagent, temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Color is expressed in units of the platinum-cobalt scale proposed by Hazen (1892, p. 427-428). A unit of color is produced by one milligram per liter of platinum in the form of the chloroplatinate ion.

The extent to which water is colored by material in solution is reported as part of the water analysis because a significant color in water may indicate the presence of organic material that may have some bearing on the dissolved solids content.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Curie is a unit for measuring radioactivity. One curie equals that quantity of any radioactive isotope undergoing 3.7×10^{10} disintegration per second.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in a horizontal plane and enclosed by a topographic divide, from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G. H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging-station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in the table below. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the weight of sediment per liter of water-sediment mixture.

Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})*	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

* Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

pH is a symbol denoting the relative concentration of hydrogen ions in a solution; pH values range from 0 to 14 — the lower the value, the more acid is the solution; i.e., the more hydrogen ions it contains.

Picocurie (PC) is a unit for measuring radioactivity. One picocurie is equivalent to 1 trillionth of a curie. See Curie.

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955).

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time flowing in a channel.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the

products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published District annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all main-stream stations are listed before the first main-stream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indentation, each indentation representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 01127880, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "127880." The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 1 (North Atlantic Slope basins) and Part 4 (St. Lawrence River basin). The records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

WELL NUMBER

The well numbering system of the U. S. Geological Survey is based on the grid system of latitude and longitude. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote the degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well.

A local well-numbering system is also used in this report. All wells are numbered consecutively within each town.

WATER RESOURCES DATA, 1972
EXPLANATION OF SURFACE WATER DATA

Collection and computation of data

The base data collected at gaging stations consists of records of stage and measurements of discharge of streams, and stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from a water-stage recorder that gives either a tape punched at 15-, 30-, or 60-minute intervals or a continuous graph of the fluctuations. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and gage observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At one station the stage-discharge relation is affected by changing stage; at this station the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by hydrologists and gage observers, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily reservoir stages may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents is given. Tables of daily mean gage heights are included for some reservoir stations.

Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or stage, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge, the maximum gage height, and the minimum discharge if there is little or no regulation are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge if it is abnormally low). In the first paragraph, headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record," the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder (digital or graphic), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, to the availability of Water Quality records, and to a recording rain gage at the gaging station is given under "REMARKS;" for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information obtained later. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), and in inches (line headed "IN. ").

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for most stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parenthesis, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, evaporation, or other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled "Surface Water Supply of the United States" there is a list of the numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Massachusetts, New Hampshire, Rhode Island, and Vermont for the period October 1960 to September 1965 are in Water Supply Papers 1901, 1902, and 1912.

Two series of summary reports entitled "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950, and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for the stations included in this report are compiled in Water-Supply Papers 1301, 1302, and 1307 through September 1950, and in 1721, 1722, and 1727 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form, and many statistical analyses have been made.

EXPLANATION OF WATER-QUALITY DATA

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water stations, no descriptive statements are given; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently, and at some sites data were recorded on punched paper tape at 60-minute intervals or on a continuous graph.

Water-quality information is presented for chemical quality, microbiology, radio chemistry, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, pH, and pesticide and herbicide content. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent daily maximum, minimum, and mean temperature. Fluvial-sediment information is given for suspended-sediment discharges and concentrations.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm), and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U. S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml,

values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using the table below.

Degrees Celsius (°C) to degrees Fahrenheit (°F)
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	8.0	46	15.5	60	23.5	74	31.0	88	39.0	102
.5	33	8.5	47	16.0	61	24.0	75	31.5	89	39.5	103
1.0	34	9.0	48	16.5	62	24.5	76	32.0	90	40.0	104
1.5	35	9.5	49	17.0	63	25.0	77	33.0	91	40.5	105
2.0	36	10.0	50	18.0	64	25.5	78	33.5	92	41.0	106
3.0	37	10.5	51	18.5	65	26.0	79	34.0	93	41.5	107
3.5	38	11.0	52	19.0	66	26.5	80	34.5	94	42.0	108
4.0	39	11.5	53	19.5	67	27.0	81	35.0	95	43.0	109
4.5	40	12.0	54	20.0	68	28.0	82	35.5	96	43.5	110
5.0	41	13.0	55	20.5	69	28.5	83	36.0	97	44.0	111
5.5	42	13.5	56	21.0	70	29.0	84	36.5	98	44.5	112
6.0	43	14.0	57	21.5	71	29.5	85	37.0	99	45.0	113
6.5	44	14.5	58	22.0	72	30.0	86	38.0	100	45.5	114
7.0	45	15.0	59	23.0	73	30.5	87	38.5	101	46.0	115

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32) \text{ or } ^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32.$$

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements and some pollutants in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 3.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical-quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

Ground-water quality does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately define ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. Most large streams have a small diurnal temperature change; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where monitors are installed, the record consists of daily maximum, minimum, and mean temperature. Where thermographs are located, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

At one station, suspended-sediment concentrations are determined from samples collected daily by using a depth-integrating cable-suspended sampler from a fixed sampling point. During periods of high or rapidly changing flow, samples are taken twice or more often throughout the day. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically with depth-integrating cable-suspended or hand samplers. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Massachusetts, New Hampshire, Rhode Island, and Vermont are listed below. Data for the North Atlantic slope basins are given in Part 1; data for the St. Lawrence River basin are given in Part 4.

Water-supply paper numbers and parts, water years 1953-70

Year	Part 1	Year	Part 1	Part 4
1953	1290	1962	1941	-
1954	1350	1963	1947	-
1955	1400	1964	1954	-
1956	1450	1965	1961	-
1957	1520	1966	1991	-
1958	1571	1967	2011	2012
1959	1641	1968	2091	2094
1960	1741	1969	*2141	*2144
1961	1881	1970	*2151	*2154

* In preparation.

HYDROLOGIC CONDITIONS

At the beginning of the water year, runoff was in the low-normal or deficient range except in southwestern Massachusetts where, although still only in the normal range, it was above median.

Cumulative runoff for October to March was in the normal range except in the central and northern sections of Vermont and New Hampshire, where it was deficient (in the lower quartile of record).

Cumulative runoff for April to September was excessive (in the upper quartile of record) throughout the district. The highest runoff for the indicated month for the period of record (which began at dates indicated) occurred as follows: for May, Passumpsic River at Passumpsic, Vt. (October 1928), Ware River at Coldbrook, Mass. (January 1928), and Housatonic River near Great Barrington, Mass. (May 1913); for June, Batten Kill at Arlington, Vt. (October 1928), West Branch Westfield River at Huntington, Mass. (September 1935), and Housatonic River near Great Barrington, Mass.; and for July, West Branch Westfield River at Huntington, Mass.

In May, a combination of rain and rapid snowmelt produced the highest peak discharge since March 1936 at Passumpsic River at Passumpsic, Vt., and the highest since June 1952 at Winooski River at Montpelier, Vt. Also in May, the peak discharge of Upper Ammonoosuc River near Groveton, N.H., was the highest natural peak since September 1954 and was exceeded during that time only by a flash flood in May 1969, caused by a dam failure upstream.

Cumulative runoff for the water year was in the normal range except in central and western Massachusetts and southwestern Vermont, where it was excessive.

At the end of the water year, runoff was deficient in parts of central New Hampshire and northern Vermont, in the high-normal or excessive range in Rhode Island and southeastern Massachusetts, and in the low-normal range elsewhere in the district.

Figure 1 on page 12 for which records of three, long-term, index gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1972 water year with the median discharge for the period 1941-70.

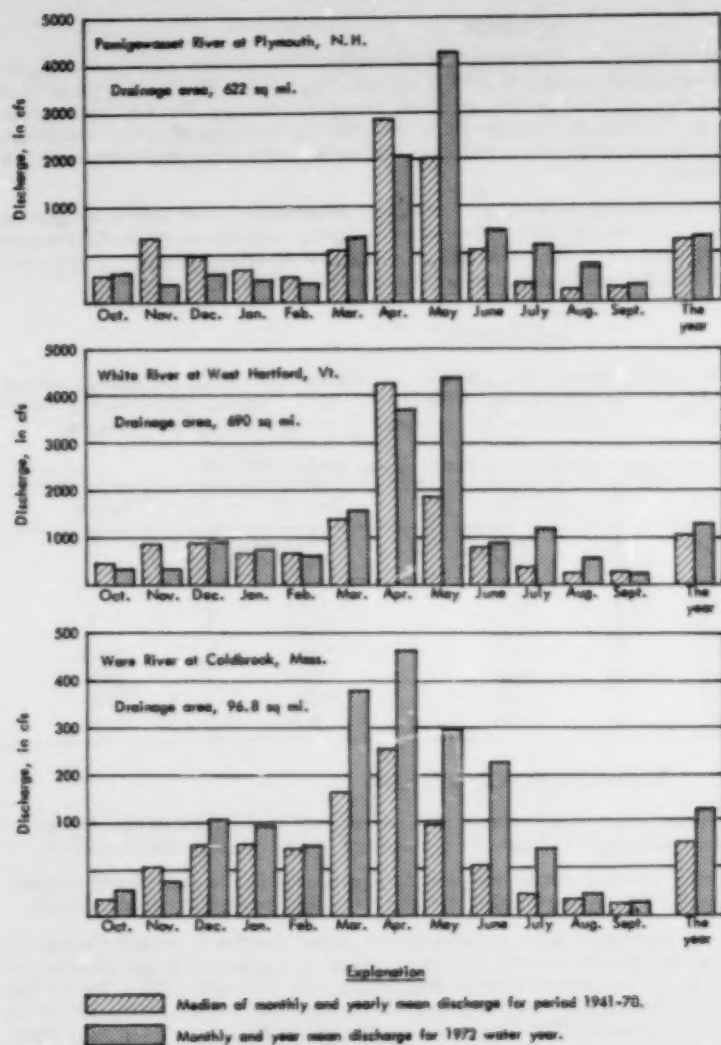


Figure 1.--Comparison of discharge at three long-term index gauging stations during 1972 water year with median discharge for period 1941-70.

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PART 1. SURFACE WATER RECORDS

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GAGING-STATION RECORDS
NORTH ATLANTIC SLOPE BASINS
ANDROSCOGGIN RIVER BASIN

01052500 Diamond River near Wentworth Location, N.H.

LOCATION.--Lat 44°52'40", long 71°03'25", Coos County, on left bank 1.0 mile upstream from mouth and 1.6 miles north of Wentworth location.

DRAINAGE AREA.--153 sq mi.

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,275 ft (from topographic map).

AVERAGE DISCHARGE.--31 years, 339 cfs (30.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,060 cfs May 4 (gage height, 8.47 ft); minimum, 29 cfs Sept. 24-26 (gage height, 1.39 ft).
Period of record: Maximum discharge, 8,630 cfs June 16, 1943 (gage height, 10.66 ft), from rating curve extended above 3,900 cfs; minimum, 6.8 cfs Aug. 27, 28, 1949, Sept. 1, 1952 (gage height, 0.81 ft).

REMARKS.--Records excellent except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	98	72	85	77	54	149	2,130	438	218	228	70
2	98	94	73	82	74	56	164	2,570	1,100	193	190	63
3	56	122	72	90	76	57	162	2,450	924	257	304	60
4	65	118	72	80	85	58	154	3,680	504	763	1,100	59
5	59	109	69	82	82	58	148	4,450	522	381	494	75
6												
7	64	100	66	81	78	58	147	2,740	388	251	304	71
8	266	150	65	78	73	57	141	3,340	368	198	241	56
9	183	200	63	77	65	56	137	3,350	374	197	250	52
10	132	135	61	75	56	55	137	2,630	427	307	221	79
11	175	96	60	75	63	54	135	2,310	756	357	205	74
12	954	87	90	75	62	54	139	1,960	725	1,080	257	58
13	508	80	270	74	61	54	142	1,680	481	474	189	50
14	304	74	260	76	60	54	158	1,660	353	284	169	46
15	275	70	215	85	64	53	154	2,630	283	219	148	55
16	293	56	180	140	82	52	177	3,860	246	193	129	62
17												
18	167	64	160	135	76	52	167	3,580	439	169	112	53
19	151	62	145	120	71	55	189	3,130	346	204	102	46
20	139	61	130	105	67	90	369	3,060	247	199	124	41
21	110	60	120	100	65	410	760	2,810	210	158	289	38
22	124	70	115	110	62	360	1,210	2,360	182	228	198	39
23												
24	118	82	120	100	61	275	925	1,980	169	318	132	37
25	111	76	110	95	59	215	701	1,750	154	639	104	35
26	106	65	100	92	58	190	659	1,230	182	291	89	32
27	100	58	100	91	57	170	630	1,000	313	186	94	29
28	118	59	105	92	56	160	687	759	417	226	133	29
29												
30	182	64	115	100	56	150	629	566	405	577	229	30
31	185	72	120	100	55	145	590	476	512	832	116	31
32	150	73	115	97	55	140	502	433	375	679	153	34
33	128	71	110	92	54	135	653	385	337	793	144	33
34	113	70	96	86	-----	130	1,160	316	234	446	101	34
35	103	-----	90	81	-----	130	-----	294	-----	296	80	-----
TOTAL	5,459	2,610	3,539	2,842	1,624	3,637	12,075	65,569	12,415	11,603	6,631	1,471
MEAN	176	87.0	114	91.7	66.3	117	403	2,115	414	374	214	49.0
MAX	954	200	270	140	85	410	1,210	4,450	1,100	1,080	1,100	79
MIN	59	58	60	74	54	52	135	294	154	158	80	29
CFSM	1.15	.57	.75	.60	.43	.76	2.63	13.8	2.71	2.44	1.40	.32
IN	1.33	.63	.86	.62	.47	.88	2.94	15.94	3.02	2.82	1.61	.36
CAL YR 1971	TOTAL 110,159	MEAN 302	MAX 3,570	MIN 24	CFSM 1.97	IN 26.78						
WTR YR 1972	TOTAL 129,775	MEAN 355	MAX 4,450	MIN 29	CFSM 2.32	IN 31.55						

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2400	8.47	5,060				
5-15	2100	7.85	4,200				

ANDROSCOGGIN RIVER BASIN

17

01053500 Androscoggin River at Errol, N.H.

LOCATION.--Lat 44°46'57" long 71°07'46", Coos County, on right bank 0.4 mile downstream from Errol Dam, 0.4 mile northeast of Errol, and 0.6 mile upstream from Clear Stream.

DRAINAGE AREA.--1,045 sq mi.

PERIOD OF RECORD.--January 1905 to current year. October 1922 to November 1943, monthly discharge only, published in WSP 1301. Prior to 1922, published as "at Errol Dam."

GAGE.--Water-stage recorder. Datum of gage is 1,227.30 ft above mean sea level. Prior to Dec. 8, 1943, nonrecording gage at Errol Dam at datum 5.0 ft higher.

AVERAGE DISCHARGE.--67 years, 1,878 cfs (24.41 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 6,110 cfs May 8 (gage height, 5.40 ft); minimum daily, 1,020 cfs May 19.

Period of record: Maximum daily discharge, 16,100 cfs May 22, 1946; minimum daily, leakage only at various times when gates in dam were closed.

Instantaneous maximum discharge not available prior to Dec. 9, 1943.

REMARKS.--Records excellent. Flow regulated by Rangeley, Mooslookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (combined usable capacity, 28,100,000 cu ft), with final regulation at Errol Dam.

COOPERATION.--Records prior to Dec. 9, 1943, furnished by Union Water Power Co.

REVISIONS.--WSP 1001: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,730	1,370	1,260	1,380	1,310	1,050	2,240	1,490	2,560	2,290	2,150
2	1,790	1,680	1,470	1,350	1,360	1,300	1,140	2,900	1,300	2,450	2,250	2,160
3	1,810	1,660	1,460	1,330	1,310	1,220	1,140	3,530	1,560	2,150	2,220	2,160
4	1,820	1,680	1,420	1,250	1,310	1,160	1,160	4,260	1,900	1,820	1,930	2,150
5	1,810	1,680	1,450	1,270	1,310	1,260	1,240	5,170	2,800	1,840	1,840	2,150
6	1,790	1,650	1,470	1,300	1,350	1,290	1,270	5,580	2,180	2,020	2,070	2,150
7	1,700	1,500	1,380	1,290	1,380	1,300	1,300	5,610	1,720	2,030	2,230	2,150
8	1,670	1,620	1,320	1,270	1,360	1,270	1,290	5,910	1,630	2,020	2,270	2,150
9	1,600	1,560	1,310	1,320	1,380	1,300	1,300	6,020	1,940	2,170	2,230	2,120
10	1,520	1,590	1,290	1,270	1,410	1,310	1,320	5,500	2,680	2,190	2,200	2,100
11	1,260	1,590	1,210	1,290	1,320	1,290	1,310	5,370	3,380	2,390	2,110	2,110
12	1,390	1,600	1,210	1,320	1,330	1,290	1,300	4,910	3,440	1,840	2,100	2,110
13	1,540	1,560	1,130	1,320	1,330	1,290	1,310	4,550	3,340	1,860	2,080	2,090
14	1,640	1,540	1,150	1,310	1,330	1,300	1,100	4,270	3,320	1,960	2,070	2,050
15	1,660	1,560	1,230	1,260	1,310	1,320	1,040	3,940	3,050	2,060	2,030	2,030
16	1,580	1,560	1,180	1,330	1,310	1,350	1,130	4,200	2,830	2,130	2,070	2,060
17	1,640	1,540	1,050	1,380	1,330	1,230	1,160	4,740	2,330	2,100	2,120	2,100
18	1,730	1,540	1,030	1,380	1,300	1,090	1,250	4,500	1,980	2,060	2,110	2,120
19	1,770	1,540	1,160	1,330	1,260	1,020	1,330	4,640	1,980	2,110	2,070	2,150
20	1,770	1,530	1,260	1,300	1,300	1,400	1,460	5,340	2,020	2,180	2,080	2,140
21	1,770	1,530	1,290	1,290	1,420	1,820	1,560	5,330	2,020	2,070	2,140	2,120
22	1,770	1,470	1,330	1,220	1,380	1,620	1,640	5,260	2,300	1,930	2,120	2,120
23	1,730	1,500	1,470	1,230	1,370	1,410	1,660	5,120	2,400	2,080	2,120	2,110
24	1,720	1,540	1,280	1,250	1,380	1,240	1,670	3,270	1,640	2,220	2,100	2,100
25	1,730	1,470	1,110	1,350	1,320	1,120	1,710	1,660	1,720	2,220	2,050	2,100
26	1,560	1,550	1,170	1,410	1,300	1,130	1,730	1,730	2,440	2,110	1,990	2,140
27	1,560	1,530	1,200	1,420	1,350	1,160	1,720	1,810	2,750	2,120	2,060	2,110
28	1,600	1,500	1,160	1,450	1,360	1,180	1,710	1,820	2,530	2,110	2,060	2,200
29	1,670	1,410	1,130	1,370	1,350	1,220	1,700	1,760	2,640	2,060	2,050	2,130
30	1,720	1,370	1,210	1,440	-----	1,260	1,850	1,680	2,640	2,150	2,080	2,070
31	1,750	-----	1,250	1,360	-----	1,110	-----	1,640	-----	2,240	2,110	-----
TOTAL	51,870	46,790	39,150	40,920	38,900	39,570	41,550	124,260	69,950	65,250	65,250	63,590
MEAN	1,673	1,560	1,263	1,320	1,341	1,276	1,385	4,008	2,332	2,105	2,105	2,120
MAX	1,820	1,730	1,470	1,450	1,420	1,820	1,850	6,020	3,440	2,560	2,290	2,200
MIN	1,260	1,370	1,030	1,220	1,260	1,020	1,040	1,640	1,300	1,820	1,840	2,030
MEAN†	793	440	559	335	477	701	2,596	12,080	2,529	2,076	701	-43
CFSMT	.76	.42	.54	.32	.40	.67	2.48	11.6	2.42	1.99	.67	-.04
IN.†	.88	.47	.62	.37	.43	.77	2.77	13.33	2.70	2.29	.77	-.05
CAL YR 1971	TOTAL 645,751	MEAN 1,769	MAX 4,700	MIN 991	MEAN† 1,608	CFSMT† 1.54	IN† 20.89					
WTR YR 1972	TOTAL 687,050	MEAN 1,877	MAX 6,020	MIN 1,020	MEAN† 1,946	CFSMT† 1.86	IN† 25.35					

† Adjusted for change in contents in Rangeley, Mooslookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.
NOTE.--Negative figures of adjusted discharge and runoff indicate evaporation and seepage exceeded inflow.

ANDROSCOGGIN RIVER BASIN

01054000 Androscoggin River near Gorham, N.H.

LOCATION.--Lat 44°26'10", long 71°11'27", Coos County, on right bank at Pulsifer Rips, 2.2 miles downstream from Dead River and 4.0 miles upstream from Gorham.

DRAINAGE AREA.--1,363 sq mi.

PERIOD OF RECORD.--October 1913 to current year. October 1922 to February 1929, monthly discharge only, published in WSP 1301. Prior to October 1928, published as "at Berlin."

GAGE.--Water-stage recorder. Datum of gage is 832.88 ft above mean sea level. Prior to Sept. 30, 1922, nonrecording gage showing head and tailwater elevations at site 3 miles upstream at different datum.

AVERAGE DISCHARGE.--59 years, 2,437 cfs (24.28 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 11,400 cfs May 8 (gage height, 8.00 ft); minimum daily, 1,480 cfs Dec. 19.

Period of record: Maximum daily discharge, 20,000 cfs June 18, 1917, Apr. 30, 1923; minimum daily, 795 cfs Mar. 15, 1948.

REMARKS.--Records excellent. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (combined usable capacity, 28,100,000 cu ft), with final regulation at Errol Dam 35 miles upstream. Diurnal fluctuation caused by powerplant 0.8 mile upstream.

REVISIONS.--WSP 1001: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,900	1,980	1,650	1,560	1,650	1,660	1,630	5,990	2,180	2,930	2,410	2,210
2	1,850	1,950	1,600	1,590	1,650	1,670	1,680	7,540	2,530	2,820	2,400	2,250
3	1,860	1,930	1,760	1,770	1,680	1,690	1,810	8,570	2,670	2,780	2,440	2,250
4	1,940	1,920	1,660	1,670	1,660	1,550	1,740	10,100	2,100	3,030	2,560	2,250
5	1,930	1,940	1,630	1,620	1,610	1,560	1,850	10,800	3,210	2,640	2,290	2,240
6	1,930	1,870	1,700	1,570	1,540	1,650	1,960	9,770	3,340	2,400	2,150	2,230
7	2,010	1,940	1,740	1,620	1,660	1,630	1,860	10,100	2,640	2,380	2,350	2,230
8	1,930	1,990	1,730	1,600	1,670	1,630	1,790	11,000	2,240	2,320	2,430	2,240
9	1,790	1,990	1,590	1,570	1,630	1,610	1,770	9,860	2,360	2,280	2,420	2,260
10	1,860	1,870	1,640	1,740	1,690	1,640	1,810	8,990	3,110	2,420	2,450	2,190
11	2,430	1,870	1,600	1,630	1,710	1,610	1,820	8,150	4,020	3,510	2,360	2,170
12	2,120	1,860	1,660	1,580	1,650	1,600	1,860	7,560	4,090	3,280	2,290	2,190
13	1,930	1,830	1,740	1,690	1,670	1,640	1,940	6,890	3,900	2,450	2,230	2,160
14	1,910	1,750	1,600	1,750	1,740	1,590	1,970	6,990	3,760	2,350	2,220	2,150
15	1,930	1,770	1,570	1,720	1,700	1,660	1,750	7,320	3,690	2,330	2,180	2,100
16	1,810	1,760	1,740	1,690	1,710	1,650	1,740	7,820	3,380	2,430	2,140	2,090
17	1,800	1,750	1,770	1,730	1,690	1,780	1,980	7,810	3,430	2,400	2,170	2,130
18	1,940	1,740	1,580	1,760	1,700	1,830	2,390	7,240	2,610	2,370	2,230	2,170
19	1,920	1,820	1,480	1,840	1,640	1,910	2,990	6,480	2,360	2,350	2,230	2,230
20	1,940	1,710	1,650	1,750	1,600	1,860	3,680	7,170	2,340	2,390	2,180	2,210
21	1,950	1,770	1,760	1,710	1,590	2,360	3,590	7,000	2,280	2,550	2,210	2,170
22	1,940	1,760	1,630	1,660	1,730	2,460	3,400	6,750	2,320	2,640	2,210	2,220
23	1,910	1,710	1,660	1,620	1,630	2,220	3,490	6,320	2,990	2,380	2,220	2,150
24	1,870	1,700	1,820	1,660	1,690	2,050	3,610	5,750	2,760	2,420	2,250	2,160
25	1,920	1,680	1,660	1,700	1,680	1,830	3,730	3,500	2,480	2,440	2,230	2,150
26	2,130	1,620	1,590	1,720	1,630	1,700	3,690	2,410	2,770	2,460	2,140	2,170
27	2,040	1,710	1,630	1,650	1,620	1,740	3,560	2,360	3,440	2,400	2,130	2,180
28	1,910	1,800	1,660	1,780	1,660	1,660	3,310	2,360	3,200	2,420	2,230	2,200
29	1,940	1,760	1,590	1,790	1,670	1,710	3,550	2,310	2,990	2,380	2,230	2,270
30	1,870	1,720	1,530	1,680	-----	1,740	4,370	2,170	3,020	2,290	2,220	2,200
31	1,910	-----	1,590	1,750	-----	1,770	-----	2,090	-----	2,380	2,210	-----
TOTAL	60,090	54,480	51,230	52,270	48,180	54,660	76,220	209,070	88,210	78,620	70,390	65,820
MEAN	1,938	1,816	1,653	1,686	1,661	1,763	2,541	6,744	2,940	2,536	2,271	2,194
MAX	2,400	1,990	1,820	1,840	1,740	2,460	4,370	11,000	4,090	3,510	2,540	2,270
MIN	1,790	1,620	1,480	1,560	1,540	1,550	1,630	2,090	2,100	2,280	2,130	2,090
MEAN†	1,058	696	949	701	739	1,188	3,752	14,810	3,137	2,507	867	31
CFSMT	.78	.51	.70	.51	.54	.87	2.75	10.9	2.30	1.84	.64	.02
IN.†	.89	.57	.80	.59	.58	1.01	3.07	12.53	2.57	2.12	.73	.03

C&L YR 1971 TOTAL 834,820

WTR YR 1972 TOTAL 909,240

MEAN 2,287

MEAN 2,484

MAX 8,660

MAX 11,000

MIN 1,480

MIN 1,480

MEAN† 2,126

MEAN† 2,553

CFSMT 1.56

CFSMT 1.87

IN† 21.15

IN† 25.49

† Adjusted for change in contents in Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.

SACO RIVER BASIN

19

01064300 Ellis River near Jackson, N.H.

LOCATION.--Lat 44°13'12", long 71°15'00", Carroll County, in White Mountain National Forest, on right bank 0.4 mile upstream from small left-bank tributary, 1.3 miles upstream from bridge on State Highway 16, and 6 miles northwest of Jackson.

DRAINAGE AREA.--10.9 sq mi.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (from topographic map). Prior to Oct. 14, 1969, at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--8 years, 31.5 cfs (39.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 458 cfs Oct. 10 (gage height, 3.27 ft), from rating curve extended above 310 cfs on basis of slope-area measurement at gage-height 8.99 ft; minimum, 3.8 cfs Feb. 24, 25, 26.

Period of record: Maximum discharge, 4,500 cfs Nov. 3, 1966 (gage height, 10.34 ft from recorder, affected by drawdown; 18.9 ft from flood-marks, site and datum then in use), from rating curve extended above 390 cfs on basis of slope-area measurement at gage height 10.34 ft; minimum, 3.7 cfs Mar. 27, 1965.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	14	8.9	8.0	4.6	4.5	14	100	170	36	13	12
2	9.4	14	8.5	8.0	5.9	6.0	16	250	135	30	12	11
3	9.4	13	8.4	7.9	6.5	6.8	20	350	69	51	18	11
4	9.4	13	8.3	7.9	6.5	5.9	19	300	59	67	15	11
5	9.4	12	8.0	7.8	6.5	5.6	18	189	53	38	11	10
6	17	12	8.0	7.3	6.2	5.4	16	116	44	32	10	8.9
7	19	38	11	7.0	5.9	5.8	14	253	52	29	10	8.9
8	12	23	9.2	6.9	5.7	5.2	12	133	47	27	10	9.2
9	10	16	8.6	6.8	5.5	5.0	11	92	52	25	15	9.8
10	108	15	8.6	7.0	5.3	5.2	11	71	48	35	17	8.9
11	74	14	17	7.3	5.2	4.8	12	66	38	47	14	8.6
12	35	13	13	7.5	5.4	5.2	13	64	34	30	11	8.6
13	26	13	10	7.5	6.0	5.8	15	92	31	26	11	8.3
14	23	13	13	7.4	5.8	5.0	18	170	30	25	11	9.8
15	20	14	12	6.8	5.6	5.4	21	323	31	22	9.8	8.9
16	17	12	21	6.4	5.6	5.2	26	228	31	20	8.6	8.6
17	16	11	13	6.6	5.6	90	35	189	27	20	9.2	8.0
18	15	11	11	7.0	5.5	60	60	179	24	17	17	7.7
19	15	11	12	6.5	5.3	40	100	164	23	18	23	7.4
20	14	13	15	6.8	4.9	30	50	129	23	17	13	7.4
21	14	11	12	5.8	4.4	21	32	187	25	24	11	7.1
22	13	10	10	6.0	4.0	17	28	148	34	24	9.8	7.1
23	13	9.0	9.0	5.8	4.0	21	30	106	80	17	9.5	6.8
24	12	8.8	10	5.8	3.8	16	38	101	89	17	9.2	6.8
25	25	8.4	12	6.0	3.8	14	38	73	73	16	9.5	6.8
26	36	8.4	10	5.8	4.0	16	37	63	66	16	9.8	6.8
27	22	8.5	9.2	5.6	4.1	16	31	62	49	16	9.8	9.5
28	18	8.6	9.5	4.6	4.3	15	30	70	51	19	56	7.4
29	15	8.6	9.2	4.6	4.3	14	40	70	48	20	22	7.1
30	15	9.8	8.0	4.6	-----	13	63	66	38	15	15	12
31	14	-----	8.0	4.6	-----	13	-----	80	-----	13	13	-----
TOTAL	665.4	386.1	331.4	202.8	150.2	484.8	868	4,484	1,574	809	433.2	261.4
MEAN	21.5	12.9	10.7	6.54	5.18	15.6	28.9	145	52.5	26.1	14.0	8.71
MAX	108	38	21	8.0	6.5	90	100	350	170	67	56	12
MIN	9.4	8.0	8.0	4.6	3.8	4.5	11	62	23	13	8.6	6.8
CFSM	1.97	1.18	.98	.60	.48	1.43	2.65	13.3	4.82	2.39	1.28	.80
IN.	2.27	1.32	1.13	.69	.51	1.85	2.96	15.38	5.37	2.76	1.48	.89

CAL YR 1971 TOTAL 9,860.6 MEAN 27.0 MAX 260 MIN 5.1 CFSM 2.48 IN 33.65
WTR YR 1972 TOTAL 10,650.3 MEAN 29.1 MAX 350 MIN 3.8 CFSM 2.67 IN 36.35

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1930	3.27	458				
5-3	-	-	†450				
5-7	1615	3.15	410				
5-15	1415	3.22	438				

† About.

NOTE.--No gage-height record Apr. 6-20, Mar. 28 to Apr. 19, May 2, 3.

SACO RIVER BASIN

01064400 Lucy Brook near North Conway, N.H.

LOCATION.--Lat 44°04'10", long 71°10'30", Carroll County, on left bank 1.6 miles upstream from mouth and 2.5 miles northwest of North Conway.

DRAINAGE AREA.--4.68 sq mi.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 710 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 9.45 cfs (27.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 251 cfs Oct. 10 (gage height, 6.74 ft); minimum, 1.1 cfs Sept. 26-29.
 Period of record: Maximum discharge, 992 cfs Nov. 3, 1966, Apr. 25, 1968 (gage height, 9.20 ft, from floodmarks), from rating curve extended above 50 cfs on basis of slope-area measurement of peak flow; maximum recorded gage height, 8.14 ft Nov. 3, 1966 (affected by drawdown); minimum discharge, 0.32 cfs Sept. 2, 3, 29, 30, 1968.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.1	4.2	4.5	3.7	3.4	11	7.8	4.0	7.6	3.5	2.4
2	3.5	5.0	4.0	4.4	3.6	3.7	11	7.8	4.0	7.6	3.5	2.4
3	3.3	5.2	3.8	4.3	3.7	3.7	12	6.5	1.8	12	3.7	2.4
4	3.1	5.5	3.6	4.7	4.0	3.6	11	9.0	1.3	14	3.7	2.4
5	3.2	5.1	3.4	4.9	4.5	3.5	11	8.5	1.1	15	3.2	2.1
6	4.3	4.8	3.1	4.0	4.2	3.4	11	6.9	0.1	11	3.0	1.9
7	4.8	4.8	2.9	3.8	4.0	3.9	11	8.7	8.5	9.1	3.0	1.9
8	3.5	4.5	2.8	3.5	3.7	3.7	9.8	4.0	7.9	7.9	3.0	1.8
9	3.2	4.8	2.7	3.4	3.4	3.5	9.4	4.9	7.9	7.1	3.0	2.1
10	5.2	4.3	2.6	3.3	3.5	3.7	9.4	3.9	8.5	7.9	3.2	1.9
11	4.4	4.0	4.6	3.5	3.4	3.7	9.4	3.3	7.4	17	2.7	1.7
12	1.8	5.8	5.8	3.8	3.4	3.5	10	3.1	6.6	9.1	2.4	1.6
13	1.2	5.7	5.7	3.7	3.3	3.4	12	3.6	6.1	7.4	2.4	1.7
14	1.0	5.5	5.3	3.7	3.3	3.3	12	5.0	5.4	7.1	2.3	2.1
15	9.1	4.4	4.4	3.4	4.3	3.7	13	6.5	5.4	6.4	2.3	1.7
16	7.8	4.8	5.7	3.4	4.2	3.6	14	5.1	5.4	5.9	2.3	1.6
17	7.1	4.8	7.9	3.3	4.0	3.6	14	5.1	5.4	5.9	2.3	1.6
18	6.6	4.8	4.2	3.2	3.9	4.0	24	4.6	5.4	5.6	2.1	1.6
19	6.5	4.8	5.4	3.2	3.9	4.0	37	3.9	5.0	5.2	2.7	1.6
20	6.2	4.8	4.8	3.4	3.7	3.7	45	3.3	5.0	5.2	2.8	1.7
21	5.8	4.6	4.4	3.5	3.6	3.6	51	2.6	4.6	5.2	2.3	1.7
22	5.6	4.5	4.3	3.7	3.5	3.5	39	27	4.6	5.9	2.2	1.4
23	5.4	4.5	4.2	3.6	3.5	4.3	34	21	5.0	5.4	2.2	1.4
24	4.8	3.9	5.0	4.0	3.4	3.0	35	16	21	4.6	1.9	1.3
25	7.6	4.0	4.0	4.2	3.3	2.9	39	13	25	4.4	1.9	1.3
26	8.8	4.2	5.4	4.5	3.3	17	39	9.4	16	4.2	1.8	1.2
27	7.0	3.7	5.3	4.3	3.2	15	34	4.5	12	3.9	3.2	1.1
28	6.2	3.7	4.8	4.1	3.2	14	31	7.6	8.8	4.4	1.6	1.1
29	5.9	3.8	4.7	4.0	3.2	13	42	7.1	7.9	4.4	4.6	1.1
30	5.4	4.5	4.6	3.9	-----	13	55	6.6	7.1	4.1	3.5	1.4
31	5.2	-----	4.5	3.8	-----	11	-----	4.2	-----	3.9	2.4	-----
TOTAL	279.7	155.3	144.5	118.5	107.4	385.5	728.0	1,240.4	339.8	242.1	98.9	50.8
MEAN	9.02	5.18	4.66	3.82	3.70	12.4	24.3	40.9	11.3	7.81	3.19	1.69
MAX	5.2	9.8	7.9	4.6	4.7	5.0	55	90	40	34	16	2.4
MIN	3.2	3.7	2.6	3.2	3.2	3.3	9.4	6.6	4.6	3.9	1.8	1.1
CFSM	1.93	1.11	1.00	.82	.79	2.66	5.19	4.55	2.41	1.67	.68	.36
IN.	2.22	1.23	1.15	.94	.85	3.16	5.79	4.86	2.70	1.92	.79	.40
CAL YD 1971	TOTAL 3,576.85	MEAN 9.80	MAX 190	MIN 6.9	CFSM 2.09	IN 28.43						
WTR YD 1972	TOTAL 3,890.00	MEAN 10.5	MAX 90	MIN 1.1	CFSM 2.27	IN 30.93						

PEAK DISCHARGE (BASE, 190 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1915	6.74	251				

SACO RIVER BASIN

21

01064500 Saco River near Conway, N.H.

LOCATION.--Lat 43°59'27", long 71°05'29", Carroll County, on left bank at Odell Falls, 1.8 miles downstream from Swift River and Conway.

DRAINAGE AREA.--386 sq mi.

PERIOD OF RECORD.--August 1903 to December 1909, January 1910 to June 1912 (gage heights only), February 1929 to current year. Monthly discharge only for some periods, published in WSP 1301. Prior to 1912, published as "at Center Conway."

GAGE.--Water-stage recorder. Datum of gage is 418.19 ft above mean sea level. Aug. 26, 1903, to June 30, 1912, nonrecording gage at site 0.8 mile downstream at different datum.

AVERAGE DISCHARGE.--49 years (1903-9, 1929-72), 906 cfs (31.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,440 cfs May 7 (gage height, 8.23 ft); minimum daily, 160 cfs Jan. 7, 8.
Period of record: Maximum discharge, 43,900 cfs Mar. 27, 1953 (gage height, 17.20 ft), from rating curve extended above 23,000 cfs on basis of slope-area measurement of peak flow; minimum, 40 cfs Mar. 16, 1932 (gage height, 1.61 ft).

REMARKS.--Records excellent except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1301: 1908-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	309	260	170	225	255	410	5,030	2,960	900	380	308
2	294	403	235	170	220	300	630	6,400	2,550	840	350	280
3	232	412	215	175	225	390	710	6,260	1,730	1,500	371	277
4	226	388	200	180	255	410	670	7,700	1,320	2,400	444	275
5	222	362	190	170	325	360	425	7,510	1,180	1,150	374	256
6	227	344	185	165	260	330	500	5,870	1,020	900	333	242
7	348	387	190	160	255	305	580	7,210	974	775	315	231
8	294	740	215	160	240	350	560	6,800	1,000	680	325	225
9	290	570	270	170	210	340	540	5,150	937	610	313	240
10	454	450	300	175	225	325	530	4,030	1,030	560	693	249
11	3,220	340	371	195	220	310	570	3,480	910	1,150	498	225
12	1,250	280	600	205	220	300	660	3,190	791	650	382	212
13	836	260	484	230	250	290	750	1,400	708	570	342	205
14	675	240	404	310	325	295	735	4,410	646	520	311	225
15	590	225	325	400	450	280	740	6,450	602	490	301	227
16	526	220	305	340	410	290	800	5,630	585	465	284	208
17	474	215	320	260	365	450	1,050	4,390	607	445	269	196
18	447	210	290	305	335	1,900	1,900	4,450	534	530	284	192
19	424	205	265	360	315	1,050	2,930	4,250	503	508	434	190
20	399	220	250	335	300	750	3,450	3,540	485	546	375	205
21	385	260	275	300	290	600	2,920	3,590	470	532	307	193
22	374	240	230	280	280	540	2,430	3,600	502	661	273	185
23	359	215	200	260	270	630	2,470	2,800	1,710	518	275	177
24	341	200	205	250	265	700	2,440	2,450	2,280	464	289	170
25	391	195	220	245	260	600	2,980	2,040	1,980	465	347	165
26	749	195	235	240	250	550	2,950	1,580	1,450	472	444	174
27	606	200	225	235	250	505	2,520	1,360	1,260	461	505	174
28	495	200	210	250	250	475	2,210	1,320	1,130	460	1,290	175
29	443	210	195	245	250	455	2,600	1,270	1,040	577	777	167
30	410	225	180	235	-----	430	3,290	1,180	950	509	456	186
31	387	-----	175	230	-----	415	-----	1,180	-----	425	355	-----
TOTAL	16,535	9,010	8,224	7,395	8,025	15,170	45,750	128,510	33,948	21,733	12,700	6,434
MEAN	533	300	265	239	277	499	1,525	4,145	1,132	701	410	214
MAX	3,220	740	600	400	450	1,900	3,450	7,910	2,560	2,400	1,290	308
MIN	222	195	175	160	220	255	410	1,180	470	425	269	165
CFSM	1,338	778	669	662	72	1,27	3,95	10,7	2,93	1,82	1,06	655
IN.	1.59	.87	.79	.71	.77	1.46	4.41	12.38	3.27	2.09	1.22	.62

CAL YR 1971 TOTAL 292,344 MEAN 801 MAX 12,200 MIN 143 CFSM 2.08 IN 28.17
 WTR YR 1972 TOTAL 313,444 MEAN 856 MAX 7,910 MIN 160 CFSM 2.22 IN 30.21

PEAK DISCHARGE (BASE, 8,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-7	2300	8.23	9,440				

SACO RIVER BASIN

01064800 Cold Brook at South Tamworth, N.H.

LOCATION.--Lat 43°48'57", long 71°17'51", Carroll County, on right bank 100 ft upstream from highway bridge on Johnson Mountain Road, 0.8 mile south of South Tamworth, and 0.9 mile upstream from mouth.

DRAINAGE AREA.--5.41 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 11.6 cfs (29.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 216 cfs Oct. 10 (gage height, 7.02 ft), from rating curve extended above 110 cfs on basis of slope-area measurement at gage height 7.61 ft; maximum gage height, 9.31 ft Mar. 17 (ice jam); minimum not determined; minimum daily, 0.52 cfs Sept. 25. Period of record: Maximum discharge, 612 cfs Nov. 7, 1963 (gage height, 10.21 ft), from rating curve extended above 80 cfs; minimum, 0.07 cfs Aug. 16-19, 23, 1965.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.0	2.0	5.0	4.0	2.7	13	7.0	6.0	7.0	3.4	2.0
2	1.1	1.0	2.4	5.0	3.7	3.4	14	6.7	6.4	7.0	2.9	1.9
3	1.1	1.4	2.2	5.0	3.5	3.0	15	6.2	1.7	6.7	3.3	1.8
4	1.1	1.4	2.1	4.0	3.7	3.7	17	4.0	1.7	9.7	3.1	2.0
5	1.1	1.4	2.1	4.0	3.5	3.5	17	7.2	1.0	7.0	2.7	1.8
6	1.4	1.4	2.0	4.7	3.0	3.4	12	6.7	8.4	5.0	2.4	1.7
7	1.7	4.8	2.0	4.5	2.8	3.3	11	7.5	7.0	5.2	2.2	1.5
8	1.4	4.0	2.0	4.2	2.5	3.4	11	6.0	4.7	4.5	2.0	1.6
9	1.2	4.2	2.7	3.8	2.3	3.2	9.7	4.5	7.0	4.2	3.6	1.5
10	4.7	3.4	2.6	4.4	2.1	3.0	10	6.0	7.0	5.3	4.6	1.7
11	4.7	3.7	13	6.0	1.0	3.0	9.7	3.5	4.4	4.6	3.0	1.5
12	14	4.0	10	4.7	1.8	3.0	12	2.8	4.0	1.7	2.4	1.3
13	0.3	1.5	8.0	5.4	2.2	3.0	16	3.5	5.1	11	2.3	1.1
14	7.3	1.3	6.0	4.6	3.3	2.7	14	4.5	4.8	10	1.9	1.3
15	6.4	1.0	6.0	4.0	3.0	2.4	14	6.0	4.2	8.0	1.4	1.5
16	5.4	1.0	8.0	3.5	2.0	2.3	20	5.0	4.5	6.7	1.3	1.2
17	4.8	2.0	10	3.3	2.8	1.6	40	4.0	4.5	7.4	1.3	1.0
18	4.8	2.8	7.5	3.2	2.6	7.0	56	3.0	4.5	7.4	1.3	1.0
19	4.2	2.6	6.2	3.4	2.4	3.5	71	2.6	3.7	6.2	1.8	.88
20	3.4	2.7	4.5	4.0	2.3	2.5	65	2.1	3.4	5.3	4.0	.72
21	3.2	2.6	3.3	4.5	2.3	1.8	52	2.3	3.4	5.1	2.5	.74
22	3.2	3.0	2.8	4.5	2.2	1.0	32	1.6	5.1	4.0	2.0	.69
23	3.2	2.2	2.6	4.6	2.1	4.6	35	1.3	2.0	4.6	1.7	.62
24	3.0	2.4	6.0	4.7	2.0	3.8	3.8	1.0	2.1	6.3	1.6	.56
25	3.9	2.8	13	6.5	2.0	2.6	4.0	2.0	2.0	6.5	1.5	.52
26	5.0	4.8	10	10	2.0	2.0	34	7.0	1.5	5.2	1.6	.65
27	4.8	2.6	6.6	8.0	1.0	1.7	31	7.0	11	4.5	5.0	.92
28	4.2	2.4	7.0	7.0	1.0	1.5	32	5.7	8.4	4.2	2.0	.77
29	4.2	2.4	6.4	6.0	1.0	1.4	41	5.7	7.0	4.4	4.5	.77
30	3.9	4.5	6.0	5.0	-----	13	5.2	5.1	6.4	4.5	3.0	2.0
31	3.0	-----	5.4	4.5	-----	12	-----	7.4	-----	3.8	2.4	-----
TOTAL	202.7	99.0	172.5	156.3	74.9	433.0	826.4	1,119.0	333.2	239.3	98.4	36.98
MEAN	6.54	3.19	5.56	5.04	2.42	14.0	27.5	36.1	11.1	7.72	3.17	1.23
MAX	4.7	6.0	13	10	4.0	7.0	71	8.0	6.0	4.6	2.0	2.0
MIN	1.1	2.2	2.0	3.2	1.8	2.3	9.7	5.1	3.4	3.8	1.7	.52
CFSM	1.21	.61	1.03	.93	.44	2.50	5.08	6.67	2.05	1.43	.59	.23
IN.	1.39	.68	1.19	1.07	.52	2.98	5.68	7.69	2.29	1.65	.68	.25

CAI YD 1971 TOTAL 3,955.07 MEAN 10.8 MAX 244 MIN .33 CFSM 2.00 IN 27.20
 WTD YD 1972 TOTAL 3,792.58 MEAN 10.4 MAX 80 MIN .52 CFSM 1.92 IN 26.08

PEAK DISCHARGE (BASE, 220 CFS).--No peak above base.

NOTE.--No gage-height record Apr. 21 to May 24, Aug. 19 to Sept. 25.

SACO RIVER BASIN

23

01065000 Ossipee River at Effingham Falls, N. H.

LOCATION.--Lat 43°47'44", long 71°03'36", Carroll County, on left bank 0.3 mile upstream from bridge on State Highway 153 at Effingham Falls, 0.35 mile downstream from outlet of Ossipee Lake, and 4 miles northwest of Effingham.

DRAINAGE AREA.--330 sq mi.

PERIOD OF RECORD.--September 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map).

AVERAGE DISCHARGE.--30 years, 677 cfs (27.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,620 cfs May 6 (gage height, 7.90 ft); minimum, 130 cfs Nov. 19; minimum daily, 131 cfs Nov. 20-24.
Period of record: Maximum discharge, 11,700 cfs Mar. 28, 1953 (gage height, 11.64 ft); minimum, about 5 cfs during part of several days Nov. 4-20, 1968 (caused by unusual regulation); minimum daily, 11 cfs Oct. 10, 1944.

REMARKS.--Records excellent. Flow regulated by Ossipee and Silver Lakes and Pine River Pond (combined capacity, 1,430,000,000 cu ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	439	137	384	344	395	1,140	2,490	884	591	542	267
2	256	435	137	382	342	386	1,120	2,670	1,380	665	532	261
3	254	432	137	383	342	386	1,130	2,840	1,400	570	528	260
4	252	429	138	378	390	387	1,150	3,160	1,360	514	392	405
5	251	425	139	377	429	391	1,160	3,520	1,210	544	291	467
6	250	420	140	374	423	396	1,140	3,600	1,100	553	297	444
7	251	417	143	370	419	390	1,130	3,460	951	655	265	430
8	250	302	145	366	415	385	1,090	3,300	848	731	195	425
9	250	224	148	363	410	380	1,060	3,070	659	671	196	421
10	253	224	152	361	405	396	1,020	2,810	571	574	198	416
11	386	224	156	360	400	362	993	2,540	826	529	199	411
12	483	225	160	358	396	374	989	1,820	673	574	198	406
13	488	225	166	358	393	361	1,020	1,420	520	592	198	402
14	491	224	170	357	392	349	1,080	1,410	518	834	198	400
15	491	224	173	357	391	351	1,110	1,660	518	990	198	397
16	490	224	177	357	393	348	1,140	1,870	515	957	198	394
17	488	224	259	356	393	370	1,210	1,880	515	938	198	390
18	485	224	413	355	454	437	1,400	1,830	514	686	199	386
19	482	175	410	354	499	595	1,710	1,730	511	263	203	383
20	478	131	407	353	495	742	2,090	1,630	401	265	206	379
21	474	131	405	353	487	830	2,420	1,540	294	214	207	376
22	470	131	402	353	480	906	2,500	1,450	295	161	206	295
23	467	131	397	351	470	1,020	2,520	1,190	419	160	205	244
24	472	131	394	350	461	1,250	2,540	660	541	166	204	242
25	475	132	394	351	451	1,400	2,630	527	579	186	203	242
26	467	133	393	352	443	1,450	2,740	537	771	218	204	240
27	461	133	392	347	433	1,420	2,730	542	884	241	204	238
28	456	133	392	347	420	1,360	2,600	542	844	447	229	236
29	450	135	390	347	408	1,300	2,470	540	812	609	261	235
30	447	137	388	347	-----	1,240	2,430	532	639	587	272	235
31	443	-----	388	345	-----	1,190	-----	533	-----	562	272	-----
TOTAL	12,367	7,174	8,242	11,146	12,178	21,577	49,462	57,303	21,952	16,247	7,898	10,327
MEAN	399	239	266	360	420	696	1,649	1,848	732	524	255	344
MAX	491	439	413	384	499	1,450	2,740	3,600	1,400	990	542	467
MIN	250	131	137	345	342	348	989	527	294	160	195	235
CAL YR 1971	TOTAL 198,481	MEAN 544	MAX 3,430	MIN 120	CFSM 1.65	IN 22.37						
WTR YR 1972	TOTAL 235,873	MEAN 644	MAX 3,600	MIN 131	CFSM 1.95	IN 26.59						

PISCATAQUA RIVER BASIN

01072100 Salmon Falls River at Milton, N.H.

LOCATION.--Lat 43°24'50", long 70°59'15", Strafford County, on right bank just downstream from Milton Pond, at Milton.

DRAINAGE AREA.--108 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 405 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 898 cfs Mar. 24 (gage height, 4.72 ft); minimum daily, 30 cfs Nov. 23 to Dec. 2.
Period of record: Maximum discharge, 1,730 cfs Feb. 12, 1970 (gage height, 5.49 ft); minimum daily, 19 cfs Aug. 30, Sept. 13, 1970.

REMARKS.--Records good. Flow completely regulated by Great East and Lovell Lakes and Horn, Wilson, and Milton (also controls Northeast and Town House) Ponds, combined usable capacity, 1,280,000,000 cu ft. See table below for figures of monthend contents.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	182	30	76	75	107	352	503	285	375	109	86
2	129	185	30	76	72	111	370	503	555	321	109	76
3	121	185	31	76	67	238	415	503	520	265	105	78
4	117	185	31	80	81	297	440	555	450	158	100	86
5	111	185	31	81	86	265	440	631	415	158	93	96
6	105	178	31	81	93	234	440	637	395	155	88	101
7	78	178	31	80	98	208	430	579	390	111	84	95
8	51	175	33	76	100	188	405	509	390	70	81	89
9	51	169	35	76	98	182	375	455	370	76	78	88
10	51	150	37	75	96	169	357	313	339	78	76	86
11	54	128	46	70	91	161	343	201	293	84	75	81
12	57	128	58	69	84	150	343	167	195	91	70	80
13	58	123	72	69	81	140	460	135	199	93	69	78
14	57	111	76	76	101	133	450	135	119	101	64	76
15	60	100	80	80	130	130	380	135	103	98	61	76
16	60	89	84	81	164	128	415	147	95	98	60	76
17	60	66	84	83	185	142	470	198	100	98	58	76
18	63	49	84	80	185	215	573	188	98	89	58	119
19	64	49	84	76	195	313	611	175	95	83	58	150
20	69	51	84	76	188	380	671	198	89	80	58	140
21	69	51	78	76	172	405	800	230	86	75	55	155
22	72	40	75	76	155	415	824	253	91	75	54	161
23	76	30	75	75	147	579	776	253	113	78	52	145
24	76	30	72	75	137	824	744	212	230	96	52	125
25	89	30	70	76	130	848	736	145	325	111	50	142
26	111	30	72	95	128	752	720	80	297	121	51	153
27	130	30	75	78	123	592	678	57	273	117	51	161
28	150	30	78	83	113	498	579	63	158	109	51	172
29	164	30	78	84	105	455	509	70	169	105	51	198
30	172	30	78	84	-----	395	509	75	325	101	80	195
31	178	-----	78	76	-----	352	-----	81	-----	98	95	-----
TOTAL	2,832	2,997	1,901	2,415	3,480	10,006	15,615	8,386	7,472	3,768	2,196	3,440
MEAN	91.4	99.9	61.3	77.9	120	323	521	271	249	122	70.8	115
MAX	178	185	84	95	195	848	824	637	555	375	109	198
MIN	51	30	30	69	67	107	343	57	86	70	50	76
(†)	669.2	448.7	532.0	564.3	665.3	829.7	1,089.2	1,283.0	1,267.1	1,242.3	1,156.5	925.7

CAL YR 1971 TOTAL 58,249 MEAN 160 MAX 848 MIN 30

WTR YR 1972 TOTAL 64,508 MEAN 176 MAX 848 MIN 30

† Monthend contents, in millions of cubic feet, in Great East and Lovell Lakes, and Horn, Wilson, Milton, Northeast, and Town House Ponds.

PISCATAQUA RIVER BASIN

25

01072850 Mahawk Brook near Center Strafford, N. H.

LOCATION.--Lat 43°15'47", long 71°05'50", Strafford County, on left bank 0.5 mile downstream from bridge on State Highway 202A and 1.2 miles east of Center Strafford.

DRAINAGE AREA.--8.87 sq mi.

PERIOD OF RECORD.--May 1964 to current year.

AVERAGE DISCHARGE.--8 years, 11.6 cfs (17.76 inches per year).

GAGE.--Water-stage recorder. Altimeter of gage is 285 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, about 95 cfs Mar. 24; maximum gage height, 3.18 ft Mar. 4 (backwater from ice); minimum discharge, 0.06 cfs Oct. 6, 9, 10.

Period of record: Maximum discharge, 555 cfs Dec. 27, 1969 (gage height, 4.21 ft); maximum gage height, 6.02 ft Feb. 11, 1970 (backwater from ice); no flow at times most years.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.60	2.5	7.0	5.3	19	31	27	42	9.5	8.0	.57
2	.10	.43	4.5	4.0	5.1	24	43	24	28	7.8	4.7	.53
3	.10	1.0	3.3	19	5.0	30	57	23	15	5.0	5.0	2.0
4	.04	1.2	2.4	13	24	40	44	44	11	5.2	6.5	13
5	.07	1.1	2.4	11	20	33	42	38	13	4.8	4.8	4.8
6	.04	1.0	2.3	8.4	16	24	32	24	9.4	4.0	3.5	4.0
7	.07	.97	7.5	8.2	14	23	35	19	7.7	3.4	2.9	2.0
8	.07	1.1	4.8	8.0	12	21	30	17	7.5	3.2	3.1	12
9	.04	1.3	4.7	8.0	11	24	28	20	7.5	7.0	3.2	13
10	1.0	1.2	7.4	8.5	10	23	20	22	7.4	5.5	3.7	15
11	7.5	1.2	13	7.0	9.5	20	30	17	7.5	3.7	3.4	12
12	3.2	1.1	14	4.2	9.0	19	30	15	4.0	3.1	2.5	10
13	1.4	1.0	11	4.5	20	18	34	13	5.0	2.4	2.2	10
14	1.3	.90	11	14	40	14	50	9.7	4.1	4.7	1.7	15
15	1.0	.90	0.6	12	50	15	42	19	3.5	7.2	2.0	21
16	.90	.83	10	0.0	40	15	43	34	2.3	4.4	1.9	14
17	.83	.83	14	7.0	35	30	40	49	2.5	3.8	1.7	15
18	.74	.93	11	4.0	27	40	44	30	2.5	3.0	1.4	12
19	.70	.83	9.0	5.4	20	34	40	22	2.5	3.1	1.4	10
20	.70	1.0	0.0	4.2	22	30	42	20	2.5	2.3	1.4	14
21	.59	.83	0.2	4.0	19	30	47	24	2.3	2.9	1.3	13
22	.59	2.0	7.5	5.0	17	44	45	21	2.0	7.0	.91	12
23	.59	2.3	7.2	5.4	15	30	43	14	23	4.2	.72	11
24	.59	1.0	11	4.2	14	30	45	11	30	15	.57	10
25	.97	1.8	17	10	13	41	40	4.0	21	10	.54	9.0
26	1.4	2.2	14	11	13	45	33	7.0	18	21	.50	4.7
27	1.3	2.0	11	9.0	13	34	24	4.0	13	10	.44	4.5
28	1.3	1.8	11	7.5	14	30	27	5.5	4.0	6.2	1.1	4.2
29	1.1	1.0	11	6.5	15	20	34	4.8	4.7	5.2	1.6	4.0
30	1.0	1.0	2.5	5.0	-----	31	33	4.0	7.1	15	1.1	4.3
31	.97	-----	7.5	5.5	-----	30	-----	3.8	-----	9.0	.73	-----
TOTAL	30.90	46.65	281.2	263.0	547.9	1,111	1,249	603.8	310.6	286.2	74.13	357.30
MEAN	1.00	1.56	9.07	8.51	18.9	36.0	41.6	19.5	10.7	8.64	2.46	11.9
MAX	7.5	10	14	19	40	50	44	43	42	21	4.0	40
MIN	.04	.43	2.3	5.5	5.0	15	27	3.8	2.3	2.3	.46	.53
CFS	.11	.14	1.02	.94	2.13	4.04	4.43	2.20	1.21	.75	.22	1.34
IN	.13	.20	1.14	1.11	2.30	4.42	5.24	2.53	1.34	.84	.32	1.50

CAL YR 1971 TOTAL 3,780.40 MEAN 10.4 MAX 95 MIN 0 CFS 1.17 IN 15.44

YR 1972 TOTAL 5,097.54 MEAN 17.9 MAX 90 MIN .04 CFS 1.47 IN 21.34

PEAK DISCHARGE (BASE, 100 CFS).--No peak above base.

NOTE.--No gage-height record Feb. 4 to Mar. 1, Mar. 6-24, Aug. 25-28, Sept. 6-30.

PISCATAQUA RIVER BASIN

01073000 Oyster River near Durham, N.H.

LOCATION.--Lat 43°08'55", long 70°57'56", Strafford County, on left bank 200 ft upstream from highway bridge, 2.5 miles west of Durham, and 7 miles upstream from mouth.

DRAINAGE AREA.--12.1 sq mi.

PERIOD OF RECORD.--October 1934 to current year. October and November 1934 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 70 ft (from topographic map). Prior to Oct. 1, 1964, at datum 1.00 ft higher.

AVERAGE DISCHARGE.--38 years, 19.1 cfs (21.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 233 cfs Mar. 23 (gage height, 3.56 ft); minimum, 0.69 cfs Sept. 1.
Period of record: Maximum discharge, 862 cfs Sept. 11, 1954 (gage height, 6.47 ft, present datum); maximum gage height, 8.45 ft, present datum, Mar. 19, 1934; minimum discharge, 0.23 cfs Aug. 18, 19, 25, 26, 27, 1971.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.5	23	12	7.5	20	68	22	72	25	11	1.0
2	1.3	1.7	12	13	6.5	30	83	23	58	19	8.6	1.1
3	1.2	2.6	9.0	17	6.0	40	102	27	36	14	7.5	13
4	1.2	2.9	9.0	16	32	50	98	81	30	13	7.3	28
5	1.6	2.4	6.4	16	25	48	91	66	32	10	6.0	7.7
6	2.0	2.0	5.6	15	22	38	81	47	22	9.1	5.2	4.4
7	3.0	2.4	9.0	13	20	35	74	36	22	7.7	4.7	2.9
8	2.3	3.6	11	13	17	35	63	31	27	7.2	5.5	3.1
9	1.8	2.8	11	14	13	40	57	53	21	8.5	4.7	2.2
10	10	2.3	15	13	13	33	57	49	35	7.4	5.2	2.6
11	14	2.3	24	13	13	28	60	38	25	6.4	4.1	1.9
12	4.3	2.4	24	14	12	25	57	31	18	5.3	3.5	1.7
13	2.4	2.4	19	14	16	23	70	26	14	5.3	3.1	1.6
14	2.0	2.3	16	20	80	22	105	23	12	8.6	2.6	3.0
15	1.8	2.0	13	18	70	20	86	49	10	6.4	2.6	3.7
16	1.7	1.9	17	14	50	20	91	68	9.3	5.2	2.3	2.6
17	1.6	1.9	23	10	40	34	97	61	9.3	4.7	2.1	2.0
18	1.6	1.8	17	10	30	87	95	48	8.2	4.1	2.1	1.8
19	1.5	2.0	15	11	25	112	81	37	5.3	3.9	2.3	1.6
20	1.6	2.1	13	11	22	89	79	33	9.6	3.8	1.9	2.5
21	1.6	2.2	12	10	28	73	83	58	8.0	5.0	1.6	2.2
22	1.6	6.3	11	10	29	85	67	41	9.9	7.7	1.3	2.0
23	1.4	5.8	9.6	10	24	215	66	31	42	8.7	1.2	1.8
24	1.5	3.7	13	12	22	194	69	24	61	12	1.1	1.6
25	2.2	3.5	21	18	20	131	58	20	46	8.7	1.0	1.5
26	3.2	3.1	18	19	18	100	47	17	56	8.1	1.0	1.5
27	2.2	3.6	15	13	17	77	38	15	40	6.4	1.0	1.4
28	1.7	4.4	14	11	17	67	33	13	28	7.3	4.1	1.4
29	1.6	5.1	14	9.8	18	68	29	11	19	19	2.9	1.3
30	1.5	37	12	8.9	-----	70	25	9.9	19	20	1.4	1.5
31	1.5	-----	11	8.3	-----	61	-----	9.8	-----	14	1.2	-----
TOTAL	78.1	120.0	442.0	407.0	712.0	1,970	2,100	1,098.7	797.5	291.5	110.1	103.6
MEAN	2.52	4.30	14.3	13.1	24.6	63.5	70.0	35.4	26.6	9.40	3.55	3.45
MAX	14	37	24	20	80	215	105	81	72	25	11	28
MIN	1.2	1.5	5.6	8.3	6.0	20	25	9.8	8.0	3.8	1.0	1.0
CFSM	.21	.33	1.18	1.08	2.03	5.25	5.79	2.93	2.20	.78	.29	.29
IN.	.24	.37	1.36	1.25	2.19	6.08	6.46	3.38	2.45	.90	.34	.32

CAL YR 1971 TOTAL 6,196.26 MEAN 17.0 MAX 130 MIN .35 CFSM 1.41 IN 19.05
WTR YR 1972 TOTAL 8,230.90 MEAN 22.5 MAX 215 MIN 1.0 CFSM 1.86 IN 25.30

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	1915	3.56	233				

PISCATAQUA RIVER BASIN

27

01073300 Lamprey River near Newmarket, N.H.

LOCATION.--Lat 43°06'09", long 70°57'11", Rockingham County, on right bank 200 ft upstream from Packers Falls, 2 miles northwest of Newmarket, and 4.6 miles upstream from mouth.

DRAINAGE AREA.--183 sq mi.

PERIOD OF RECORD.--July 1934 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

AVERAGE DISCHARGE.--38 years, 274 cfs (20.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,030 cfs Mar. 25 (gage height, 7.36 ft); minimum daily, 14 cfs Oct. 1.
Period of record: Maximum discharge, 5,490 cfs Mar. 20, 1936 (gage height, 14.88 ft), from rating curve extended above 3,100 cfs on basis of computation of flow over dam at gage height 14.69 ft; minimum daily, 1 cfs Oct. 21, 1935.

REMARKS.--Records excellent except those below 50 cfs, which are good. Some regulation by Pawtuckaway and Mendums Ponds (combined capacity, about 600,000,000 cu ft).

REVISIONS (WATER YEARS).--WSP 1231: 1936-37.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

JAN	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	48	272	201	156	274	339	414	433	330	243	29
2	15	41	220	204	145	334	907	378	630	273	200	30
3	13	42	205	236	137	435	1,050	375	651	239	168	60
4	18	41	175	242	302	501	1,210	680	593	225	149	254
5	17	75	132	260	348	597	1,210	747	602	195	128	161
6	16	74	112	232	335	612	1,100	700	465	173	111	114
7	16	83	156	214	342	591	1,010	581	402	150	97	86
8	13	81	152	199	301	551	905	490	373	158	93	66
9	15	70	155	176	255	547	814	564	342	193	90	56
10	25	61	173	208	223	515	757	615	424	149	92	51
11	170	56	208	220	156	493	748	608	405	120	81	48
12	75	59	249	222	174	440	743	542	328	104	74	48
13	69	25	251	222	208	399	791	476	269	97	69	44
14	89	53	242	265	355	369	1,080	422	230	111	64	47
15	144	51	223	275	406	339	1,180	511	205	108	60	62
16	157	50	230	270	703	335	1,180	703	181	103	55	60
17	140	48	278	210	678	409	1,270	831	169	96	93	37
18	122	44	277	190	555	499	1,330	984	151	83	54	52
19	106	43	225	196	470	953	1,390	993	141	73	51	46
20	113	41	227	260	346	1,170	1,360	789	141	69	47	63
21	138	43	229	197	348	1,250	1,360	793	134	75	63	56
22	140	63	219	189	351	1,160	1,280	745	133	130	40	50
23	140	70	167	185	323	1,470	1,180	655	296	173	38	45
24	125	68	203	195	333	1,750	1,110	535	544	196	36	40
25	119	58	204	232	285	1,970	1,060	439	524	322	33	37
26	118	70	273	252	271	1,790	964	368	558	592	31	34
27	109	81	284	239	258	1,400	762	315	464	503	29	33
28	104	77	262	222	255	1,130	597	275	378	444	37	31
29	125	77	250	195	253	970	520	243	300	458	40	31
30	115	223	230	181	-----	995	482	218	261	397	35	36
31	100	-----	196	171	-----	912	-----	196	-----	301	32	-----
TOTAL	2,635	2,114	6,733	6,699	9,727	25,198	30,119	17,163	10,725	6,630	2,373	1,825
MEAN	85.0	70.5	217	216	313	813	1,004	554	358	214	76.5	60.8
MAX	157	223	284	275	703	1,370	1,390	993	851	592	243	254
MIN	14	41	112	171	137	274	462	196	133	69	29	29
CFSM	4.40	3.39	1.19	1.18	1.83	4.44	5.49	3.03	1.98	1.17	.42	.33
IN.	.54	.43	1.37	1.36	1.98	5.12	6.12	3.49	2.18	1.35	.48	.37

CAL YR 1971 TOTAL 49,201.0 MEAN 244 MAX 1,500 MIN 7.8 CFSM 1.33 IN 18.13
 1972 TOTAL 121,409.0 MEAN 333 MAX 1,670 MIN 14 CFSM 1.82 IN 24.79

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

PISCATAQUA RIVER BASIN

01073600 Dudley Brook near Exeter, N.H.

LOCATION.--Lat 42°59'37", long 71°01'24", Rockingham County, on right bank 2.4 miles upstream from mouth and 3.5 miles west of Exeter.

DRAINAGE AREA.--4.97 sq mi.

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 6.62 cfs (18.09 inches per year).

EXTREMES.--Current year: Maximum discharge, about 105 cfs Mar. 23 (occurred during period of backwater from ice); maximum gage height, 6.01 ft Feb. 14 (backwater from ice); minimum daily discharge, 0.04 cfs Oct. 18, 22-24.

Period of record: Maximum discharge, about 300 cfs Mar. 19, 1968 (gage height, about 7.40 ft), from rating curve extended above 210 cfs; no flow at times some years.

REMARKS.--Records good except those for winter period and those below 0.10 cfs, which are fair.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.14	31	3.5	2.2	4.7	25	6.5	29	20	7.0	.54
2	.06	.21	18	3.8	2.0	4.7	36	6.3	30	14	4.6	.52
3	.06	.43	7.4	4.4	1.9	12	43	7.4	12	8.7	3.3	3.7
4	.06	.72	4.4	5.5	20	20	36	52	6.9	16	2.5	31
5	.05	.56	2.4	6.4	30	22	33	30	16	11	2.2	15
6	.05	.41	2.1	6.6	20	20	27	16	11	6.1	1.7	6.5
7	.05	.43	1.9	6.0	12	19	23	11	7.7	4.1	1.4	2.8
8	.05	.42	2.4	5.7	7.5	17	19	5.7	9.2	3.4	1.4	1.7
9	.06	.45	3.1	5.2	6.0	19	17	20	10	3.1	1.5	1.3
10	.09	.49	4.7	5.0	4.8	18	17	26	30	2.7	1.8	1.2
11	.44	.22	11	6.0	3.8	14	20	15	24	2.1	1.8	1.1
12	.74	.22	16	9.5	3.2	11	19	13	9.7	1.6	1.4	.93
13	.50	.32	11	10	12	4.5	24	11	5.6	1.5	1.2	.84
14	.16	.32	8.4	15	40	8.0	53	8.3	4.0	2.0	1.1	1.1
15	.10	.32	6.2	14	25	7.4	29	26	3.1	2.5	1.0	1.7
16	.10	.27	7.3	7.0	18	6.6	25	34	2.6	1.8	.93	1.9
17	.08	.57	15	3.5	13	9.0	32	22	2.9	1.4	.84	1.5
18	.06	.22	10	2.7	9.0	50	33	14	2.9	1.2	.81	1.2
19	.35	.24	7.0	2.4	5.0	60	24	10	2.6	1.1	.81	1.5
20	.06	.43	5.0	2.2	6.4	45	25	8.6	2.7	.98	.78	9.2
21	.06	.26	3.6	2.3	5.8	33	34	24	2.7	1.1	.69	10
22	.04	2.4	3.2	2.5	5.4	40	23	17	2.9	6.4	.57	5.2
23	.04	3.7	3.0	2.8	5.3	97	22	9.7	20	8.6	.54	3.1
24	.04	2.5	4.5	3.5	5.0	60	27	6.9	47	8.6	.52	2.3
25	.14	1.7	17	5.0	4.8	40	19	5.3	22	16	.50	2.1
26	.47	1.1	14	11	4.7	30	14	4.3	21	60	.50	2.0
27	.41	.93	9.3	7.0	4.7	23	11	3.7	16	21	.47	2.2
28	.30	1.8	6.9	4.5	4.7	20	4.2	3.4	8.8	9.7	.78	2.3
29	.21	2.2	5.5	3.2	4.7	22	8.2	2.8	5.7	12	1.0	2.3
30	.18	13	6.5	2.8	-----	28	7.1	2.5	5.0	24	.93	2.0
31	.15	-----	3.8	2.4	-----	22	-----	2.1	-----	13	.66	-----
TOTAL	5.33	37.26	248.8	171.2	289.9	789.9	734.5	427.5	373.0	289.68	45.23	118.73
MEAN	.17	1.24	8.03	5.52	10.0	25.5	24.5	13.4	12.4	9.34	1.46	3.96
MAX	.76	13	31	15	40	97	53	52	47	60	7.0	31
MIN	.04	.14	1.9	2.2	1.9	4.7	7.1	2.1	2.6	.98	.47	.52
CFSM	.03	.25	1.62	1.11	2.01	5.13	4.93	2.78	2.50	1.86	.29	.80
IN.	.04	.28	1.86	1.28	2.17	5.91	5.50	3.20	2.79	2.17	.34	.89

CAL YR 1971 TOTAL 2,305.00 MEAN 6.32 MAX 73 MIN 0 CFSM 1.27 IN 17.25

WTR YR 1972 TOTAL 3,531.03 MEAN 9.65 MAX 97 MIN .04 CFSM 1.94 IN 26.43

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	-	-	1105				

† About.

MERRIMACK RIVER BASIN

29

01075000 Pemigewasset River at Woodstock, N.H.

LOCATION.--Lat 43°38'34", long 71°40'48", Grafton County, on right bank 0.2 mile east of Woodstock and 0.7 mile upstream from Eastman Brook.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 499 cfs (35.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,870 cfs May 4 (gage height, 9.12 ft); minimum daily, 93 cfs Sept. 24.
Period of record: Maximum discharge, 47,000 cfs Oct. 24, 1959 (gage height, 16.13 ft), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 42 cfs Feb. 11, 1948.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation caused by powerplant above station. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1701: 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972											
JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	120	195	150	145	115	110	335	2,580	2,090	331	195
2	115	198	130	140	110	190	380	2,260	2,270	304	179
3	115	218	110	160	115	240	380	2,740	1,160	355	266
4	115	195	120	150	130	260	350	5,000	809	1,230	282
5	115	182	100	140	150	200	340	4,230	710	510	212
6	123	172	100	130	140	165	330	2,970	563	375	179
7	156	250	150	120	125	130	313	3,750	803	326	166
8	156	345	180	110	120	160	286	3,220	716	290	179
9	135	235	160	105	115	145	286	2,610	803	286	299
10	980	208	150	125	110	130	286	1,980	870	317	658
11	1,980	202	200	130	110	130	308	1,720	829	1,430	370
12	638	199	250	140	110	130	326	1,530	590	563	274
13	420	176	210	130	120	130	380	1,610	480	375	240
14	340	150	180	150	140	120	350	2,390	400	340	215
15	295	156	170	190	160	132	345	4,440	365	306	218
16	266	160	200	170	150	132	579	3,390	370	274	192
17	240	153	270	160	130	515	905	3,060	370	270	176
18	212	153	200	150	125	3,680	1,100	2,970	313	240	290
19	202	160	140	170	120	1,420	1,320	2,970	286	299	435
20	199	189	170	180	115	877	1,820	2,620	274	525	266
21	189	192	160	170	115	644	1,230	2,700	266	390	205
22	176	163	140	155	110	557	1,000	2,510	258	552	179
23	160	158	130	150	110	988	988	1,960	662	335	163
24	156	98	150	160	105	783	1,050	1,760	740	405	153
25	215	139	270	160	105	563	1,220	1,450	680	365	150
26	626	139	240	155	105	450	1,120	1,100	485	331	153
27	265	145	215	155	100	385	920	935	385	322	195
28	274	145	195	145	100	360	856	635	340	335	2,610
29	236	130	180	135	100	350	1,180	884	500	299	870
30	215	140	165	125	-----	335	1,660	752	350	246	440
31	198	-----	155	120	-----	326	-----	835	-----	215	326
TOTAL	9,733	5,307	5,360	4,535	3,460	14,746	21,943	75,891	19,757	12,759	11,035
MEAN	314	177	173	146	119	476	731	2,448	659	412	356
MAX	1,580	345	270	190	160	3,680	1,820	5,000	2,270	1,430	2,610
MIN	115	98	100	105	100	110	286	752	258	215	150
CFSM	1.63	.92	.90	.76	.62	2.47	3.79	12.7	3.41	2.13	1.84
IN.	1.98	1.02	1.03	.87	.67	2.84	4.23	14.63	3.81	2.46	2.13

CAL YR 1971 TOTAL 161,113 MEAN 441 MAX 4,340 MIN 73 CFSM 2.29 IN 31.05
WTR YR 1972 TOTAL 188,943 MEAN 516 MAX 5,000 MIN 93 CFSM 2.67 IN 36.42

PEAK DISCHARGE (BASE, 7,100 CFS).--No peak above base.

MERRIMACK RIVER BASIN

01075800 Stevens Brook near Wentworth, N.H.

LOCATION.--Lat 43°50'12", long 71°53'07", Grafton County, on left bank 150 ft upstream from highway bridge, 0.2 mile upstream from mouth, and 2.5 miles southeast of Wentworth.

DRAINAGE AREA.--2.94 sq mi.

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 595 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 4.12 cfs (19.03 inches per year).

EXTREMES.--Current year: Maximum discharge, 72 cfs May 4 (gage height, 2.72 ft); maximum gage height, 3.21 ft Mar. 18 (ice jam); minimum discharge, 0.07 cfs Oct. 2-6.

Period of record: Maximum discharge, 688 cfs July 29, 1969 (gage height, 5.27 ft), from rating curve extended above 120 cfs; minimum, 0.01 cfs Aug. 8-13, Sept. 18-29, 1963, Sept. 16, 19-21, 1964, Aug. 15-18, 1965, Aug. 18-23, 1971.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2	.07	.29	1.3	.80	.88	.80	6.2	34	8.6	1.0	.74	.59
3	.09	.27	.83	.75	.78	3.0	9.7	28	18	.86	.55	.47
4	.07	.27	.50	1.1	.73	5.0	10	24	8.3	1.8	.68	.39
5	.07	.27	.50	.90	2.0	3.5	7.8	39	5.0	9.2	.68	.36
6	.07	.27	.52	.85	1.5	2.5	4.6	34	4.3	3.6	.47	.31
7		.27	.49	.80	1.0	2.0	5.8	21	3.0	2.1	.39	.29
8		.20	.50	.70	.60	1.8	5.6	27	5.4	1.2	.31	.25
9		.27	1.0	.65	.93	1.6	5.4	18	4.8	.80	.31	.25
10		.27	1.4	.60	.73	1.5	4.3	19	4.3	.55	.39	.29
11	4.3	.27	1.5	.52	.63	1.4	4.7	13	3.6	.86	.63	.24
12		.27	1.0	.50	.59	1.3	5.8	11	3.1	12	.39	.21
13	2.8	.27	1.0	.70	.55	1.3	7.4	9.4	2.2	4.5	.29	.21
14	1.1	.24	4.9	.80	1.2	1.2	10	12	1.8	2.1	.29	.19
15	.68	.27	3.0	5.0	13	1.1	7.4	14	1.3	1.5	.24	.19
16	.40	.25	2.3	9.0	6.5	1.1	6.2	18	1.0	1.0	.24	.18
17		.25	3.1	4.0	3.4	1.1	10	14	1.7	.63	.24	.18
18		.25	4.9	2.0	2.7	10	22	11	2.1	.51	.22	.17
19		.25	2.7	1.8	1.9	50	24	8.6	1.2	.39	.27	.17
20		.25	1.1	1.5	1.6	16	30	7.1	.93	.47	.29	.16
21		.25	1.8	1.4	1.5	15	32	6.0	.88	1.1	.24	.17
22		.25	1.2	1.3	1.3	9.2	20	5.4	.80	1.9	.18	.17
23		.23	.80	1.1	1.1	9.0	17	4.3	.74	2.7	.17	.14
24		.21	.70	1.1	.88	23	18	3.1	2.3	2.8	.16	.14
25		.21	.80	1.4	.98	16	23	2.5	6.5	20	.15	.14
26		.25	.95	3.0	.78	10	23	1.9	6.2	7.6	.14	.14
27		.27	.90	4.5	.73	9.3	18	1.6	3.9	5.8	.13	.14
28		.27	.80	2.5	.73	7.4	14	1.3	2.6	3.9	1.0	.14
29		.27	.75	2.3	.68	6.0	13	1.1	1.7	2.6	24	.14
30		.27	1.1	1.7	.65	9.7	18	.80	1.2	2.8	6.0	.14
31		1.3	1.0	1.4	-----	5.4	26	.63	.86	1.7	2.2	.16
	.34	-----	.90	1.7	-----	6.0	-----	.80	-----	1.0	1.1	-----
TOTAL	27.61	9.79	63.41	54.97	50.78	226.70	410.9	385.53	108.29	98.97	43.09	6.72
MEAN	.89	.33	2.05	1.77	1.75	7.30	13.7	12.6	3.61	3.19	1.39	.22
MAX	11	1.3	10	8.0	13	50	32	38	18	20	24	.59
MIN	.07	.23	.49	.50	.55	.80	4.3	.63	.74	.39	.13	.14
CFSM	.30	.11	.70	.60	.60	2.48	4.66	4.20	1.23	1.09	.47	.07
IN	.35	.12	.80	.69	.64	2.86	5.20	4.93	1.37	1.25	.55	.09

CAL YR 1971 TOTAL 1,298.32 MEAN 3.53 MAX 58 MIN .01 CFSM 1.20 IN 16.30
WTR YR 1972 TOTAL 1,490.18 MEAN 4.07 MAX 50 MIN .07 CFSM 1.38 IN 18.86

PEAK DISCHARGE (BASE: 90 CFS).--No peak above base.

MERRIMACK RIVER BASIN

31

01076000 Baker River near Rummy, N.H.

LOCATION.--Lat 43°47'46", long 71°50'42", Grafton County, on right bank 200 ft upstream from small right-bank tributary, 0.3 mile upstream from Halls Brook, and 1.8 miles southwest of Rummy.

DRAINAGE AREA.--143 sq mi.

PERIOD OF RECORD.--October 1928 to current year. October 1928 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Concrete control since Sept. 10, 1938. Altitude of gage is 495 ft (from topographic map).

AVERAGE DISCHARGE.--44 years, 249 cfs (23.65 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,540 cfs May 4 (gage height, 6.76 ft); minimum, 23 cfs Nov. 24.

Period of record: Maximum discharge, 21,400 cfs June 15, 1942 (gage height, 15.50 ft), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 13.03, 14.49, and 15.50 ft; minimum, 6.5 cfs Dec. 4, 1947, caused by ice conditions upstream. Maximum discharge since valley was settled about 1766, 25,900 cfs Nov. 3, 1927 (gage height, 17.4 ft, from floodmarks), from rating curve extended above 3,800 cfs as described above.

REMARKS.--Records excellent except those for winter period, which are fair. High flow slightly affected by retarding reservoirs since 1968.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 781: 1934(M). WSP 1231: 1929-33(M), 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	55	76	90	90	90	278	1,810	528	125	98	118
2	19	55	71	85	90	125	367	1,870	993	115	84	94
3	16	62	69	92	90	175	410	1,630	513	210	93	91
4	10	60	69	78	100	220	350	2,170	329	460	103	71
5	78	54	55	77	125	140	326	2,300	276	270	86	65
6	20	53	53	74	120	150	302	1,520	220	170	74	58
7	18	50	40	75	110	120	279	1,620	333	130	66	53
8	36	08	78	74	100	115	244	1,380	298	110	67	48
9	31	01	73	74	95	110	234	1,160	277	100	65	50
10	00	70	72	77	92	105	240	939	261	200	143	48
11	415	68	137	77	80	105	272	789	235	560	97	43
12	148	65	220	78	87	105	313	604	193	450	77	42
13	120	67	160	90	85	100	444	658	163	289	71	40
14	105	64	125	100	140	100	386	701	141	197	65	48
15	01	64	105	120	240	100	352	982	126	145	67	50
16	40	88	110	100	200	195	515	812	134	114	63	43
17	71	52	150	95	140	200	921	666	156	101	56	42
18	64	53	120	94	140	1,700	1,250	950	126	89	61	42
19	50	55	75	105	130	1,100	1,410	493	111	84	101	38
20	54	63	90	100	120	697	1,720	427	106	146	73	45
21	82	68	110	94	110	524	1,260	403	102	143	59	42
22	50	64	83	90	105	427	1,050	367	94	227	51	38
23	48	55	70	90	100	779	1,030	292	126	245	47	37
24	45	41	94	100	95	733	1,140	251	313	775	43	34
25	46	68	115	105	90	554	1,300	215	381	456	40	34
26	121	53	125	145	88	408	1,170	177	293	401	42	35
27	140	47	120	135	88	223	983	157	220	278	48	38
28	82	65	110	130	98	280	860	144	170	223	1,300	38
29	71	63	110	115	88	257	1,200	132	150	185	471	37
30	63	78	100	100	272	1,400	118	121	144	246	42	42
31	59	-----	95	95	257	257	115	-----	115	161	-----	-----
TOTAL	2,419	1,834	3,085	2,941	2,305	10,516	21,906	25,542	7,489	7,257	4,118	1,494
MEAN	78.0	61.1	99.5	94.9	114	339	730	824	250	234	133	49.8
MAX	415	98	220	145	240	1,700	1,720	2,300	993	775	1,300	118
MIN	29	41	40	75	85	90	234	115	94	84	40	34
CFSM	.55	.63	.70	.66	.80	2.37	5.10	5.76	1.75	1.64	.93	.35
IN	.63	.68	.80	.77	.86	2.74	5.70	6.64	1.95	1.89	1.07	.39

CAL YR 1971 TOTAL 73,515 MEAN 201 MAX 3,060 MIN 10 CFSM 1.41 IN 19.12
WTR YR 1972 TOTAL 91,906 MEAN 251 MAX 2,300 MIN 24 CFSM 1.76 IN 23.91

PEAK DISCHARGE (BASE, 3,600 CFS).--No peak above base.

MERRIMACK RIVER BASIN

01076500 Pemigewasset River at Plymouth, N.H.

LOCATION.--Lat 43°45'33", long 71°41'10", Grafton County, on right bank 150 ft downstream from bridge at Plymouth and 0.3 mile downstream from Baker River.

DRAINAGE AREA.--622 sq mi.

PERIOD OF RECORD.--October 1903 to current year. Records for April 1886 to September 1903, published in WSP 124, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 457.07 ft above mean sea level. Prior to Jan. 1, 1910, nonrecording gage at sites 150 and 200 ft upstream at present datum or datum 1.11 ft lower. Jan. 1, 1910, to Sept. 30, 1926, nonrecording gage at site 200 ft upstream at present datum.

AVERAGE DISCHARGE.--69 years, 1,333 cfs (29.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs May 5 (gage height, 10.70 ft); minimum, 221 cfs Sept. 25.
Period of record: Maximum discharge, 65,400 cfs Mar. 19, 1936 (gage height, 29.0 ft, from floodmarks), from rating curve extended above 43,000 cfs on basis of computations of flow over dam at gage heights 23.0, 27.4, and 29.0 ft; minimum, 39 cfs Oct. 1, 3, 4, 1948; minimum daily, 45 cfs Sept. 20, 1923.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation during period 1940-52 caused by powerplants above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 471: 1912-14. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). WSP 1721: 1959(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	416	450	480	420	310	1,400	7,780	3,010	870	550	700
2	246	408	390	470	400	390	1,680	9,830	4,910	810	495	580
3	240	463	430	510	400	550	1,830	9,120	2,810	740	550	512
4	234	454	390	510	450	700	1,610	12,000	1,900	2,500	690	474
5	228	416	350	480	500	660	1,510	13,700	1,670	1,500	560	432
6	234	382	400	440	460	600	1,490	8,190	1,440	1,090	467	392
7	305	490	480	420	430	560	1,340	8,600	1,640	900	424	360
8	312	720	540	440	410	540	1,150	8,660	1,630	770	424	338
9	258	584	480	430	400	520	1,140	6,240	1,540	700	416	344
10	738	482	450	440	390	490	1,130	4,860	1,710	640	1,230	353
11	4,390	463	550	440	390	470	1,278	3,940	1,630	3,460	850	317
12	1,840	434	1,100	440	390	450	1,350	3,480	1,350	2,090	609	295
13	1,080	408	880	440	400	440	1,840	3,260	1,160	1,350	512	282
14	830	357	740	500	470	440	1,730	3,970	1,030	1,080	458	331
15	710	310	660	580	550	440	1,610	7,360	940	910	458	346
16	619	357	700	540	500	440	2,200	6,790	930	770	432	295
17	542	340	1,100	450	440	560	3,640	5,540	1,040	790	384	276
18	482	340	900	450	410	4,500	5,170	4,760	880	680	416	263
19	444	340	400	500	380	5,600	5,450	4,630	770	630	880	257
20	416	366	600	560	360	2,800	7,730	4,180	720	1,090	430	269
21	408	400	690	500	340	2,400	5,580	3,890	690	890	467	257
22	382	382	650	450	330	1,900	4,300	3,830	660	1,260	392	245
23	374	340	450	450	320	2,700	4,210	3,110	970	1,080	360	238
24	348	310	540	480	320	3,300	4,260	2,740	1,680	2,020	331	232
25	366	300	680	550	320	2,700	5,320	2,400	1,760	1,530	317	221
26	960	400	750	680	310	1,700	4,840	1,960	1,420	1,340	331	232
27	900	420	700	600	310	1,350	3,960	1,730	1,170	1,080	324	245
28	680	400	640	540	310	1,250	3,350	1,620	990	1,030	4,250	251
29	564	350	580	490	310	1,200	4,200	1,530	1,080	910	2,390	226
30	492	410	530	460	1,150	5,490	1,380	1,380	920	770	1,250	232
31	444	-----	500	440	-----	1,200	-----	1,320	-----	630	880	-----
TOTAL	20,324	12,154	18,900	15,700	11,420	42,330	91,720	162,400	44,050	35,910	22,718	9,799
MEAN	656	405	610	490	394	1,365	3,057	5,239	1,468	1,158	733	327
MAX	4,390	720	1,100	680	550	5,600	7,730	13,700	4,910	3,460	4,250	700
MIN	228	300	350	420	310	310	1,130	1,320	660	630	317	221
CFSM	1.05	.65	.98	.79	.63	2.19	4.91	8.42	2.36	1.86	1.18	.53
IN.	1.22	.73	1.13	.91	.68	2.53	5.49	9.71	2.63	2.15	1.36	.59

CAL YR 1971 TOTAL 413,433 MEAN 1,133 MAX 14,600 MIN 186 CFSM 1.82 IN 24.73
MTR YR 1972 TOTAL 486,925 MEAN 1,330 MAX 13,700 MIN 221 CFSM 2.16 IN 29.12

PEAK DISCHARGE (BASE, 12,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0300	10.70	16,200				

MERRIMACK RIVER BASIN

33

01077000 Squam River at Ashland, N.H.

LOCATION.--Lat 43°42'19", long 71°37'49", Grafton County, on right bank 200 ft upstream from highway bridge, 0.7 mile north of Ashland, and 1.4 miles downstream from Little Squam Lake.

DRAINAGE AREA.--57.6 sq mi.

PERIOD OF RECORD.--August 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 545 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 85.0 cfs.

EXTREMES.--Current year: Maximum discharge, 342 cfs May 4 (gage height, 11.51 ft); minimum daily, 18 cfs July 1, 2.
Period of record: Maximum discharge, 617 cfs Apr. 19, 23, 1969 (gage height, 12.24 ft); minimum daily, 1.4 cfs Nov. 28, 1969.

REMARKS.--Records excellent. Flow completely regulated by Squam and Little Squam Lakes.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	59	56	56	54	54	109	126	117	18	117	82
2	60	59	56	56	54	54	111	126	117	18	115	81
3	60	59	56	56	54	54	111	160	115	38	115	81
4	60	59	56	56	54	54	111	268	115	75	113	81
5	60	57	56	56	54	54	111	308	115	103	111	81
6	60	57	56	56	54	54	96	308	115	82	107	81
7	60	57	56	56	54	54	77	305	115	60	107	81
8	60	57	56	56	54	54	77	305	115	37	103	81
9	59	57	56	56	54	54	77	262	115	28	103	81
10	60	57	56	56	54	54	77	169	115	28	102	81
11	60	57	57	56	54	54	77	117	115	33	100	81
12	60	57	56	56	54	54	77	115	122	53	100	79
13	60	57	56	56	54	54	79	117	128	72	98	81
14	60	57	56	56	54	54	79	117	100	137	96	81
15	59	57	56	56	54	54	79	118	77	167	96	81
16	59	57	56	56	54	54	81	118	77	179	96	79
17	59	57	56	56	54	56	82	117	77	151	94	79
18	59	57	56	56	54	57	82	117	75	124	96	79
19	59	57	56	56	54	56	84	117	75	124	94	81
20	59	57	56	56	54	56	102	117	75	124	94	81
21	59	57	56	56	54	56	156	117	74	124	89	79
22	59	57	56	56	54	57	201	117	75	124	82	79
23	59	56	56	56	54	57	201	115	75	124	82	79
24	59	56	56	56	54	57	201	115	75	132	82	79
25	59	57	56	56	54	57	203	115	75	126	82	79
26	59	57	56	56	54	57	203	115	75	126	82	79
27	59	57	56	56	54	57	201	115	74	124	82	79
28	59	56	56	54	54	57	169	115	74	122	82	79
29	59	57	56	54	54	96	126	115	75	122	82	79
30	59	57	56	54	54	100	126	115	49	120	82	79
31	59	-----	56	54	-----	109	-----	115	-----	118	82	-----
TOTAL	1,942	1,715	1,717	1,728	1,566	1,848	3,566	4,776	2,796	3,015	2,966	2,403
MEAN	59.4	57.2	56.0	55.7	54.0	59.6	119	154	93.2	97.3	95.7	80.1
MAX	60	59	57	56	54	100	203	308	128	179	117	82
MIN	59	56	56	54	54	54	77	115	49	18	82	79

CAL YR 1971 TOTAL 27,155.7 MEAN 74.4 MAX 148 MIN 9.7
WTR YR 1972 TOTAL 29,958.0 MEAN 81.9 MAX 309 MIN 18

MERRIMACK RIVER BASIN

01078000 Smith River near Bristol, N.H.

LOCATION.--Lat 43°34'04", long 71°44'54", Merrimack County, on right bank in Hill, 1.5 miles upstream from mouth and 1.8 miles southwest of Bristol.

DRAINAGE AREA.--85.8 sq mi.

PERIOD OF RECORD.--May 1918 to current year.

GAGE.--Water-stage recorder. Datum of gage is 449.80 ft above mean sea level (levels by Corps of Engineers). Prior to Nov. 25, 1933, nonrecording gage at site 1.5 miles upstream at different datum.

AVERAGE DISCHARGE.--54 years, 140 cfs (22.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs May 4 (gage height, 6.25 ft); minimum, 8.6 cfs Oct. 6.

Period of record: Maximum discharge, 8,100 cfs Mar. 19, 1936 (gage height, 16.09 ft, from floodmarks), from rating curve extended above 2,700 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 2.7 cfs Aug. 2, 1933.

Maximum stage since at least 1885, that of Mar. 19, 1936.

REMARKS.--Records excellent except those for winter period, which are fair. Prior to 1954, some diurnal fluctuation caused by small mill above station; greater fluctuation prior to 1941.

REVISIONS (WATER YEARS).--WSP 711: Drainage area. WSP 781: 1934. WSP 1231: 1919, 1920-21(M), 1922-31, 1932-33(M), 1941-43.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	22	43	51	45	56	205	940	386	104	77	20
2	10	22	40	50	43	40	250	1,360	920	96	62	18
3	10	22	37	54	40	112	288	1,070	312	77	67	18
4	9.5	22	35	54	54	126	279	1,180	201	129	70	18
5	9.3	22	31	52	76	170	258	1,240	157	113	59	17
6	9.7	22	28	48	71	107	245	985	131	84	51	16
7	12	23	33	46	64	94	225	745	133	67	45	14
8	11	26	39	45	56	86	201	685	133	56	45	13
9	12	30	45	43	52	79	187	595	126	48	55	13
10	56	28	56	45	48	73	190	540	116	44	56	13
11	157	27	106	52	45	68	213	418	104	294	51	12
12	110	26	155	54	43	65	243	340	45	300	37	12
13	63	26	136	53	44	63	306	291	77	177	35	12
14	46	23	104	50	104	61	303	258	65	133	33	15
15	37	23	85	78	136	60	297	279	60	100	33	19
16	32	23	42	95	151	60	374	129	62	77	32	19
17	29	23	104	66	135	104	675	288	75	92	31	16
18	25	23	100	58	118	340	930	243	68	123	30	14
19	23	24	65	56	99	400	1,050	213	58	96	30	14
20	22	25	60	53	60	449	1,180	192	56	79	28	17
21	21	26	65	52	80	422	1,050	203	55	94	25	21
22	21	27	56	48	74	370	855	185	53	196	23	18
23	20	22	47	47	65	500	765	157	103	173	21	14
24	19	20	52	49	66	560	785	135	228	545	20	13
25	24	20	69	54	63	535	880	118	253	493	19	12
26	31	26	84	72	60	476	890	103	210	350	20	12
27	33	28	77	74	57	306	760	92	175	270	26	12
28	31	30	66	65	55	253	640	84	124	201	42	11
29	27	30	62	57	54	228	665	74	97	147	35	11
30	25	37	57	52	-----	220	785	66	85	115	28	15
31	23	-----	54	49	-----	208	-----	131	-----	90	22	-----
TOTAL	968.5	748	2,075	1,721	2,092	6,781	15,964	13,449	4,316	4,963	1,212	449
MEAN	31.2	24.9	66.9	55.5	72.1	219	532	434	144	160	39.1	15.0
MAX	157	37	155	85	151	560	1,180	1,380	520	545	77	21
MIN	9.3	20	28	43	40	56	187	66	53	44	19	11
CFSM	36	29	78	65	84	255	620	506	168	186	46	17
IN	42	32	90	75	91	294	692	583	187	215	53	19

CAL YR 1971 TOTAL 39,969.7 MEAN 110 MAX 1,260 MIN 9.4 CFSM 1.28 IN 17.33
WTR YR 1972 TOTAL 54,738.5 MEAN 150 MAX 1,380 MIN 9.3 CFSM 1.75 IN 23.73

PEAK DISCHARGE (BASE, 1.150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1900	5.68	1,210				
5-4	0200	6.25	1,500				

MERRIMACK RIVER BASIN

35

01080000 Lake Winnepesaukee at Weirs Beach, N.H.

LOCATION.--Lat 43°36'27", long 71°27'30", Belknap County, 1,300 ft north of highway bridge at Weirs Beach.

DRAINAGE AREA.--363 sq mi at outlet at Lakeport.

PERIOD OF RECORD.--September 1933 to current year. Prior to November 1937, monthend contents only, published in WSP 1301. Prior to October 1970, published as "at The Weirs."

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above mean sea level. Prior to November 1937, nonrecording gage at lake outlet at Lakeport at datum 0.53 ft higher. Nov. 24, 1937, to Nov. 7, 1965, water-stage recorder at site 500 ft south at present datum.

EXTREMES.--Current year: Maximum daily gage height, 4.71 ft June 3; minimum daily, 2.52 ft Feb. 12, 13.

Period of record: Maximum daily gage height, 5.86 ft May 22, 23, 1954; minimum daily, 0.63 ft Dec. 11, 1941.

REMARKS.--Lake used for recreation and conservation for development of water power. Usable capacity, 7,220,000,000 cu ft between elevations 500.65 and 504.32 ft above mean sea level. Stage regulated at outlet and by Wentworth, Marrymeeting (see p. 67), and other lakes. Contents given herein are computed from gage height at 2400 on last day of month, eliminating the effect of seiche and wind action.

Capacity table (gage height, in feet, and contents, in millions of cubic feet)

2.0	13,880
3.0	15,840
4.0	17,840
5.0	19,850

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.19	3.04	2.68	2.80	2.62	2.58	3.13	3.95	4.66	4.63	4.35	4.07
2	3.16	3.04	2.68	2.81	2.60	2.58	3.13	4.00	4.70	4.40	4.31	4.05
3	3.17	3.02	2.67	2.84	2.60	2.61	3.14	4.04	4.71	4.41	4.30	4.06
4	3.13	3.00	2.65	2.84	2.66	2.62	3.15	4.20	4.70	4.42	4.25	4.01
5	3.12	2.98	2.65	2.84	2.64	2.63	3.14	4.26	4.69	4.42	4.24	4.00
6	3.11	2.97	2.66	2.84	2.63	2.63	3.16	4.33	4.67	4.41	4.22	3.99
7	3.10	2.94	2.71	2.84	2.61	2.63	3.20	4.35	4.65	4.40	4.21	3.98
8	3.07	2.92	2.71	2.82	2.59	2.62	3.22	4.39	4.63	4.39	4.19	3.96
9	3.07	2.88	2.70	2.82	2.56	2.61	3.23	4.43	4.60	4.38	4.19	3.93
10	3.13	2.87	2.73	2.82	2.55	2.60	3.25	4.46	4.55	4.37	4.15	3.88
11	3.20	2.88	2.73	2.81	2.54	2.60	3.28	4.46	4.53	4.46	4.14	3.86
12	3.10	2.84	2.75	2.81	2.52	2.57	3.30	4.47	4.51	4.47	4.15	3.86
13	3.10	2.80	2.72	2.80	2.52	2.56	3.36	4.48	4.49	4.47	4.13	3.86
14	3.10	2.80	2.73	2.79	2.56	2.54	3.41	4.49	4.48	4.48	4.12	3.86
15	3.19	2.79	2.76	2.77	2.57	2.58	3.43	4.54	4.47	4.49	4.12	3.86
16	3.18	2.77	2.75	2.75	2.56	2.60	3.47	4.59	4.47	4.48	4.10	3.84
17	3.19	2.76	2.75	2.75	2.55	2.68	3.53	4.62	4.48	4.49	4.09	3.82
18	3.16	2.75	2.76	2.75	2.55	2.76	3.58	4.62	4.49	4.49	4.09	3.82
19	3.15	2.74	2.75	2.73	2.59	2.80	3.64	4.62	4.48	4.49	4.08	3.80
20	3.13	2.72	2.78	2.72	2.60	2.83	3.71	4.60	4.47	4.49	4.08	3.77
21	3.12	2.72	2.77	2.72	2.60	2.86	3.77	4.60	4.47	4.48	4.06	3.74
22	3.11	2.60	2.70	2.72	2.59	2.95	3.79	4.58	4.51	4.48	4.05	3.68
23	3.10	2.66	2.73	2.70	2.58	3.09	3.83	4.55	4.54	4.50	4.05	3.65
24	3.09	2.67	2.74	2.69	2.54	3.16	3.86	4.54	4.57	4.56	4.04	3.63
25	3.10	2.70	2.70	2.69	2.58	3.19	3.88	4.52	4.56	4.55	4.05	3.60
26	3.11	2.66	2.73	2.69	2.60	3.21	3.90	4.49	4.54	4.53	4.10	3.57
27	3.10	2.70	2.74	2.68	2.61	3.19	3.90	4.48	4.51	4.50	4.10	3.55
28	3.09	2.69	2.74	2.68	2.60	3.17	3.90	4.48	4.49	4.48	4.13	3.54
29	3.09	2.69	2.74	2.67	2.59	3.16	3.91	4.48	4.47	4.46	4.10	3.51
30	3.08	2.72	2.76	2.65	-----	3.15	3.92	4.46	4.45	4.42	4.09	3.48
31	3.07	-----	2.81	2.63	-----	3.14	-----	4.51	-----	4.39	4.08	-----
MEAN	3.13	2.81	2.73	2.76	2.58	2.80	3.50	4.44	4.55	4.46	4.14	3.81
MAX	3.20	3.04	2.81	2.84	2.66	3.21	3.92	4.62	4.71	4.56	4.35	4.07
MIN	3.07	2.66	2.65	2.63	2.52	2.54	3.13	3.95	4.45	4.37	4.04	3.48
(?)	15,940	15,250	15,450	15,120	15,020	16,100	17,720	18,980	18,740	18,560	17,980	16,760
(#)	-112	-266	+74.7	-123	-39.9	+403	+625	+470	-92.6	-67.2	-217	-471

CAL YR 1971 MEAN 3.33 MAX 4.68 MIN 2.52 (†) -21.2
WTR YR 1972 MEAN 3.48 MAX 4.71 MIN 2.52 (†) +16.4

† Contents, in millions of cubic feet, at 2400 on last day of month.

‡ Change in contents, equivalent in cubic feet per second.

LOCATION.--Lat 43°32'57", long 71°27'54", Belknap County, 100 ft upstream from highway bridge across Paus Bay at Lakeport.

DRAINAGE AREA, --363 sq mi.

PERIOD OF RECORD.--January 1860 to December 1911 (monthly gage heights only, published in WSP 301), June 1933 to current year.

GAGE.--Water-stage recorder. Keeler deflection meter, and measuring flume. Datum of gage is 500.55 ft above mean sea level, datum of 1929. January 1860 to December 1911, nonrecording gage at site 150 ft downstream at same datum. June 1, 1933, to Sept. 30, 1936, nonrecording gage and continuous-recording current meter at present site and datum. Oct. 1, 1936, to May 23, 1944, discharge computed from flow over spillway and through gates and wheels at site 150 ft downstream.

AVERAGE DISCHARGE.--39 years, 520 cfs.

EXTREMES.--Current year: Maximum daily discharge, 1,590 cfs Apr. 25; minimum daily, 125 cfs Oct. 6-14.
Period of record: Maximum daily discharge, 2,890 cfs Mar. 31, 1936; no flow Sept. 29, 1962.

REMARKS.--Records good. Flow completely regulated by Winnepesaukee (see preceding page), Wentworth, Merrymeeting (see p. 67), and other lakes. Daily discharge computed from relation between discharge, stage, and deflection of vane in measuring flume.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	265	250	245	555	600	1,450	880	435	535	845	310
2	235	265	250	245	555	600	1,450	690	880	500	645	305
3	290	265	250	245	555	595	1,460	695	1,070	505	285	310
4	385	265	240	245	560	590	1,460	690	1,070	520	285	295
5	220	265	240	245	555	590	1,180	685	1,050	520	255	305
6	175	265	240	245	555	595	640	690	1,040	435	255	305
7	125	265	240	245	555	595	640	715	1,040	260	255	315
8	115	265	240	245	555	595	645	720	1,040	260	235	315
9	125	260	240	245	555	590	645	730	1,040	260	255	315
10	125	260	240	335	555	590	650	725	1,030	260	285	310
11	125	260	240	570	550	590	655	710	1,030	265	270	290
12	125	260	240	570	550	590	655	725	930	275	255	290
13	125	260	240	570	550	595	760	725	630	280	255	290
14	125	260	240	570	550	595	935	710	620	280	255	275
15	175	260	245	565	550	590	940	740	610	290	230	370
16	270	255	240	565	550	595	945	840	495	290	230	510
17	275	255	255	565	550	605	1,070	1,000	295	295	195	510
18	270	265	255	560	550	600	1,290	295	295	295	195	515
19	255	255	255	565	555	605	1,320	1,320	280	295	195	525
20	255	255	255	565	560	605	1,440	1,300	295	295	195	515
21	255	255	255	565	550	610	1,560	1,300	295	295	195	515
22	250	255	255	565	560	625	1,560	1,300	295	295	195	505
23	250	255	255	555	560	625	1,570	1,080	285	295	195	440
24	250	255	245	550	565	755	1,580	640	910	315	280	550
25	250	255	240	550	565	1,330	1,590	635	595	690	305	525
26	240	255	240	555	565	1,430	1,590	520	990	870	310	525
27	240	255	240	560	565	1,430	1,420	310	985	860	310	525
28	250	255	240	560	570	1,420	1,260	310	1,000	860	295	530
29	270	255	240	560	580	1,430	1,020	310	830	855	310	530
30	265	255	240	560	-----	1,440	1,000	310	555	855	310	520
31	265	-----	245	555	-----	1,440	-----	315	-----	850	310	-----
TOTAL	9,750	7,775	7,590	14,360	16,160	24,445	34,280	23,468	21,895	13,955	8,890	12,340
MEAN	210	259	245	463	557	789	1,143	756	730	450	287	411
MAX	240	265	255	570	580	1,440	1,590	1,320	1,070	870	845	550
MIN	175	265	240	245	550	590	640	310	265	260	195	275
CAL YR 1971	TOTAL 160,130		MEAN 455	MAX 1,340	MIN 125							
CAL YR 1972												

MERRIMACK RIVER BASIN

37

01081000 Winnepesaukee River at Tilton, N.H.

LOCATION.--Lat 43°26'31", long 71°35'20", Belknap County, on right bank at Tilton and 0.3 mile upstream from Packer Brook.

DRAINAGE AREA.--471 sq mi.

PERIOD OF RECORD.--January 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 441.87 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--35 years, 677 cfs.

EXTREMES.--Current year: Maximum discharge, 2,400 cfs Apr. 25 (gage height, 6.41 ft); minimum daily, 195 cfs Nov. 16, 17.
Period of record: Maximum discharge, 3,810 cfs Sept. 21, 1938 (gage height, 7.90 ft); maximum gage height, 7.93 ft Mar. 27, 1953; minimum daily discharge, 48 cfs Aug. 31, 1941.

REMARKS.--Records excellent. Flow regulated by powerplants prior to 1967 and by Winnepesaukee (see sta 01080000), Winnisquam 4.5 miles upstream, Wentworth, Merrymeeting (see p. 67), and other lakes above station.

REVISIONS (WATER YEARS).--WSP 1901: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	266	241	355	614	639	1,760	1,640	505	673	828	363
2	333	271	245	358	613	667	1,850	1,520	895	529	789	358
3	325	272	241	370	615	702	1,940	1,410	1,140	333	506	360
4	312	271	242	377	635	726	1,940	1,470	1,180	618	449	356
5	304	276	242	392	625	729	1,910	1,410	1,260	910	406	339
6	298	273	318	380	635	717	1,790	1,290	1,240	714	377	331
7	275	277	532	365	634	704	1,590	1,190	1,230	531	362	324
8	246	278	520	365	615	693	1,420	1,100	1,230	398	355	319
9	275	257	488	345	607	687	1,270	907	1,220	373	349	320
10	258	252	477	350	559	676	1,180	673	1,210	359	355	316
11	339	253	485	381	593	666	1,140	922	1,200	423	338	300
12	299	242	486	448	588	660	1,120	584	1,180	415	324	294
13	262	205	455	486	557	655	1,170	621	1,160	394	312	297
14	238	199	431	526	652	652	1,230	661	968	371	299	311
15	224	198	420	560	686	680	1,300	784	495	328	295	365
16	216	195	406	560	700	680	1,430	950	329	323	279	504
17	222	195	405	575	694	741	1,620	1,250	289	326	266	511
18	223	199	401	582	678	892	1,860	1,330	292	283	263	518
19	227	202	381	582	651	1,000	2,010	1,470	293	297	262	526
20	227	198	381	596	596	1,020	2,170	1,500	296	331	251	536
21	222	197	371	614	675	983	2,290	1,530	301	331	240	524
22	223	211	363	627	669	1,000	2,280	1,540	317	388	232	528
23	230	210	345	622	660	1,250	2,320	1,520	347	417	230	534
24	237	210	344	628	653	1,400	2,360	1,460	542	777	228	520
25	255	233	358	637	642	1,430	2,390	1,280	905	1,110	236	517
26	270	245	355	650	652	1,480	2,340	1,110	1,030	1,050	282	520
27	273	243	347	655	652	1,560	2,240	662	1,160	1,030	321	522
28	273	244	346	649	642	1,620	2,110	550	1,160	948	389	522
29	270	240	343	638	635	1,670	1,950	385	1,150	828	397	519
30	270	237	350	630	-----	1,720	1,770	348	1,010	822	385	521
31	271	-----	360	623	-----	1,730	-----	365	-----	825	369	-----
TOTAL	8,194	7,049	11,679	15,926	18,647	30,479	53,750	33,012	25,534	17,455	10,974	12,775
MEAN	264	235	377	514	643	982	1,792	1,065	851	563	354	426
MAX	347	278	532	655	700	1,730	2,390	1,640	1,260	1,110	828	536
MIN	216	195	241	345	588	639	1,120	348	289	283	228	294
CAL YR 1971	TOTAL 217,703	MEAN 596	MAX 1,740	MIN 195								
WTR YR 1972	TOTAL 245,424	MEAN 671	MAX 2,390	MIN 195								

MERRIMACK RIVER BASIN

01081500 Merrimack River at Franklin Junction, N.H.

LOCATION.--Lat 43°25'26", long 71°39'12", Merrimack County, on right bank at Franklin Junction, 1 mile downstream from confluence of Pemigewasset and Winnepesaukee Rivers.

DRAINAGE AREA.--1,507 sq mi.

PERIOD OF RECORD.--July 1903 to January 1904, March 1904 to January 1905, March 1905 to current year.

GAGE.--Water-stage recorder. Datum of gage is 250.4 ft above mean sea level, unadjusted. Prior to Sept. 13, 1923, nonrecording gage at bridge 350 ft downstream at same datum.

AVERAGE DISCHARGE.--67 years (1905-72), 2,724 cfs (24.55 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,200 cfs May 5 (gage height, 13.65 ft); minimum daily, 549 cfs Sept. 9.

Period of record: Maximum discharge, 83,000 cfs Mar. 19, 1936 (gage height, 36.4 ft, from floodmarks), from rating curve extended above 30,000 cfs on basis of slope-area measurement and computation of flow over dam at gage height 29.5 ft and velocity-area study; minimum daily, 169 cfs Aug. 28, 1965. Maximum discharge since construction of Franklin Falls Reservoir in 1942, 22,400 cfs Apr. 4, 1951 (gage height, 16.34 ft).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants, by Franklin Falls Reservoir (4 miles upstream) since 1942, and by Squam, Little Squam, Newfound, Winnepesaukee, Winnisquam, Wentworth, Merrymseting, and other lakes. See page 67 for description and monthend contents of many of these reservoirs.

REVISIONS (WATER YEARS).--WSP 401: 1914. WSP 641: 1923(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1911-13, 1916-17(M), 1919(M), 1922(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,220	921	980	1,250	1,410	1,370	4,200	10,700	3,830	2,350	2,210	1,380
2	939	994	856	1,200	1,340	1,600	4,540	12,300	6,670	2,030	1,590	972
3	948	1,070	779	1,150	1,290	1,900	4,830	13,000	6,390	1,640	1,530	1,080
4	826	873	854	1,200	1,420	2,110	4,830	14,600	4,420	2,290	1,470	892
5	669	956	820	1,200	1,550	2,250	4,770	16,500	4,290	3,790	1,320	940
6	670	929	967	1,150	1,650	2,080	4,630	15,800	3,680	2,530	1,250	988
7	666	1,070	1,160	1,000	1,550	1,670	4,390	13,100	3,340	1,920	1,270	908
8	591	1,240	1,160	900	1,450	1,680	4,130	12,700	3,160	1,490	1,190	785
9	570	1,140	1,420	950	1,400	1,640	3,510	11,600	3,330	1,370	1,070	549
10	879	995	1,320	1,000	1,300	1,570	3,230	9,300	3,350	1,310	1,510	634
11	1,770	972	1,320	1,100	1,250	1,650	3,810	7,030	3,310	2,870	1,590	614
12	3,240	982	1,740	1,080	1,150	1,650	3,860	9,940	3,230	4,210	1,660	748
13	1,910	854	2,030	1,180	1,150	1,650	4,150	5,320	2,880	3,040	1,410	718
14	1,640	856	1,600	1,330	1,250	1,410	4,180	5,390	2,590	2,380	1,230	661
15	1,370	892	1,430	1,450	1,710	1,540	4,270	7,550	1,930	2,100	1,050	725
16	1,060	732	1,450	1,550	2,240	1,650	4,570	10,100	1,620	1,660	944	800
17	927	809	1,590	1,550	2,120	2,230	6,610	9,200	1,780	1,780	785	900
18	1,010	765	1,740	1,700	1,970	3,800	9,570	8,150	1,380	1,640	838	916
19	941	722	1,300	1,500	1,770	7,540	10,800	7,810	1,510	1,590	664	868
20	902	813	1,300	1,500	1,700	7,040	12,100	7,260	1,440	1,670	785	892
21	860	874	1,160	1,380	1,750	5,110	12,960	7,420	1,440	2,040	1,070	980
22	842	954	1,250	1,460	1,500	4,080	10,780	6,270	2,170	2,260	908	932
23	845	880	1,300	1,410	1,550	6,350	9,940	6,010	1,520	2,680	822	868
24	837	796	1,200	1,380	1,600	7,390	9,780	5,000	1,540	3,930	785	823
25	686	788	1,040	1,370	1,450	6,730	10,400	4,650	3,230	5,000	753	876
26	1,310	762	1,350	1,450	1,580	5,490	10,800	3,980	3,300	4,000	748	884
27	1,840	762	1,230	1,700	1,340	5,180	9,960	2,880	3,310	3,690	614	815
28	1,240	843	1,430	1,750	1,300	4,460	8,320	2,670	3,050	3,200	2,590	876
29	1,080	942	1,300	1,550	1,290	4,360	7,800	2,460	2,810	3,110	4,210	916
30	898	1,000	1,260	1,490	-----	4,370	9,130	1,990	2,750	2,600	2,160	892
31	1,050	-----	1,300	1,450	-----	4,360	-----	2,170	-----	2,320	1,510	-----
TOTAL	34,236	27,186	39,906	41,330	43,950	105,910	206,730	248,850	89,250	78,490	41,648	25,832
MEAN	1,104	906	1,287	1,333	1,516	3,416	6,891	8,027	2,975	2,532	1,343	861
MAX	3,240	1,240	2,030	1,750	2,240	7,540	12,900	16,500	6,670	5,000	4,210	1,380
MIN	570	722	779	900	1,150	1,370	3,230	1,990	1,380	1,310	614	549
CFSM	.73	.60	.85	.88	1.01	2.27	4.57	5.33	1.97	1.68	.89	.57
IN.	.85	.67	.99	1.02	1.68	2.61	5.10	6.14	2.20	1.94	1.03	.64

CAL YR 1971 TOTAL 847,054 MEAN 2,321 MAX 16,400 MIN 525 CFSM 1.54 IN 20.91
 MTR YR 1972 TOTAL 983,318 MEAN 2,687 MAX 16,500 MIN 549 CFSM 1.78 IN 24.27

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

39

01082000 Contoocook River at Peterborough, N.H.

LOCATION.--Lat 42°51'45", long 71°57'35", Hillsborough County, on left bank 1,100 ft downstream from milldam, 1 mile south of Peterborough, and 1.5 miles upstream from Nubanusit Brook.

DRAINAGE AREA.--68.1 sq mi.

PERIOD OF RECORD.--July 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

AVERAGE DISCHARGE.--27 years, 114 cfs (22.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,160 cfs Apr. 20 (gage height, 4.44 ft); minimum daily, 15 cfs Sept. 12, 13.

Period of record: Maximum discharge, 2,640 cfs Nov. 26, 1950 (gage height, 6.35 ft), from rating curve extended above 1,700 cfs; minimum daily, 0.8 cfs Sept. 15, 16, 1953.

Flood in September 1938 reached a stage of about 15 ft, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Flow slightly regulated by mill and reservoirs above station; regulation greater prior to 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	26	89	105	76	96	140	306	526	160	33	21
2	14	31	74	135	74	134	230	305	388	133	31	20
3	18	39	70	140	73	147	237	300	240	115	33	20
4	18	41	62	117	94	245	215	467	187	143	34	21
5	35	36	57	115	90	210	206	357	194	126	29	20
6	64	33	56	110	80	180	195	411	193	110	27	19
7	64	40	71	110	74	155	191	336	189	115	28	18
8	49	43	87	105	70	164	170	287	166	101	33	17
9	39	39	84	110	64	165	157	372	190	88	64	17
10	61	37	80	145	83	140	157	440	216	77	57	17
11	65	37	113	157	60	120	164	376	164	68	46	16
12	62	35	136	143	58	108	178	306	149	60	39	15
13	53	35	110	137	57	100	204	251	124	50	35	15
14	46	33	92	207	140	95	300	213	114	71	30	21
15	61	33	74	200	190	102	304	204	192	61	29	21
16	36	33	132	145	140	110	342	346	94	55	26	19
17	33	34	175	125	140	227	773	446	89	66	25	18
18	31	34	157	110	120	422	874	374	82	69	25	17
19	30	34	120	100	135	454	881	329	77	70	25	17
20	24	35	111	96	95	393	1,090	273	75	62	23	19
21	25	35	102	91	90	746	904	263	70	68	22	19
22	24	42	88	90	85	310	715	282	80	59	21	19
23	27	38	85	90	81	526	827	236	184	106	20	17
24	26	40	121	89	80	509	400	195	236	90	20	17
25	34	46	203	125	80	401	719	166	184	70	20	17
26	34	55	166	130	80	312	506	138	168	59	20	17
27	32	48	139	115	78	252	499	115	134	53	21	17
28	30	46	129	100	81	215	417	103	115	47	36	16
29	28	56	125	92	81	207	363	92	94	42	31	16
30	25	104	109	84	-----	208	373	66	112	38	27	16
31	25	-----	100	78	-----	183	-----	103	-----	34	24	-----
TOTAL	1,161	1,218	3,318	3,776	2,642	7,228	13,505	8,838	4,987	2,558	934	539
MEAN	37.5	40.6	107	122	81.1	233	422	285	166	81.9	30.1	18.0
MAX	85	104	203	287	190	528	1,090	507	526	163	64	21
MIN	14	26	56	78	57	45	157	66	70	34	20	15
CFSM	255	40	1,257	1,74	1,34	3,42	6,64	4,19	2,44	1,20	44	26
IN.	6.3	6.7	1.81	2.05	1.44	3.45	7.41	4.83	2.72	1.39	.51	.29
CAL YR 1971	TOTAL 34,902	MEAN 95.6	MAX 770	MIN 13	CFSM 1,440	IN 19.07						
WTH YR 1972	TOTAL 50,744	MEAN 139	MAX 1,090	MIN 15	CFSM 2,04	IN 27.72						

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1600	4.44	1,160				
4-23	1200	4.02	912				

MERRIMACK RIVER BASIN

0108000 Nubanusett Brook near Peterborough, N.H.

LOCATION.--Lat 42°53'10", long 71°58'24", Hillsborough County, on left bank 1.2 miles downstream from Edward MacDowell Reservoir, 1.3 miles northwest of Peterborough, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--46.9 sq mi.

PERIOD OF RECORD.--October 1920 to September 1931, July 1945 to current year. Monthly discharge only October 1920, published in WSP 1301.

GAGE.--Water-stage recorder. Altitude of gage is 790 ft (from topographic map). Prior to Oct. 1, 1931, at site 550 ft downstream at different datum.

AVERAGE DISCHARGE.--38 years, 81.3 cfs (23.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 665 cfs Apr. 21 (gage height, 4.36 ft); minimum daily, 11 cfs Oct. 4-8.

Period of record: Maximum discharge, 1,130 cfs Apr. 11, 1931 (gage height, 5.99 ft, site and datum then in use), from rating curve extended above 380 cfs; minimum daily, 0.5 cfs Aug. 1, 1926. Maximum discharge since construction of Edward MacDowell Reservoir in 1930, 699 cfs Apr. 12, 1960 (gage height, 4.54 ft).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by mills and Nubanusett Lake, Edward MacDowell Reservoir since 1950 (see p. 67), and other reservoirs above station.

REVISIONS (WATER YEARS).--WSP 561: 1921(M). WSP 1051: Drainage area.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	41	130	50	53	143	261	137	62	23	23
2	13	22	37	140	44	63	155	214	204	99	21	18
3	12	32	34	86	55	76	169	213	218	108	22	16
4	11	34	31	91	59	105	170	251	195	106	23	15
5	11	38	28	84	65	100	167	289	156	105	19	16
6	11	36	26	74	60	88	158	298	110	98	18	24
7	11	40	33	74	53	76	157	285	92	60	18	32
8	11	44	40	71	44	78	168	263	73	85	22	31
9	12	39	42	71	43	84	135	259	77	55	25	24
10	25	34	43	86	41	83	128	266	91	47	28	17
11	40	33	58	100	40	60	129	270	84	44	24	14
12	45	36	75	100	40	75	137	255	74	40	22	14
13	34	38	77	97	50	73	162	225	62	46	21	16
14	29	35	71	132	105	78	196	187	42	59	20	20
15	24	34	66	155	102	66	214	183	32	59	20	27
16	20	30	77	120	96	98	235	223	68	49	19	49
17	18	25	107	100	85	105	310	249	48	53	19	63
18	16	22	115	90	71	100	288	253	39	55	18	59
19	15	20	100	83	64	140	447	238	35	50	19	45
20	14	20	85	77	62	300	409	218	33	43	18	31
21	14	19	77	72	60	330	531	206	32	34	17	25
22	14	26	70	65	58	310	627	187	38	35	16	23
23	14	23	62	61	56	325	492	166	58	41	16	19
24	13	23	69	61	55	385	583	136	79	50	15	19
25	18	27	115	75	53	356	608	112	87	51	15	23
26	20	27	125	77	53	313	581	79	91	48	14	38
27	22	30	117	70	53	252	539	69	91	42	17	52
28	22	29	106	63	53	196	465	67	81	36	38	54
29	20	28	100	58	49	172	376	63	66	31	60	46
30	19	36	91	55	-----	160	305	60	63	28	51	34
31	18	-----	90	53	-----	146	-----	67	-----	25	34	-----
TOTAL	561	981	2,208	2,675	1,726	4,895	9,164	6,112	2,547	1,770	712	887
MEAN	18.7	31.0	71.2	86.3	55.5	158	305	197	84.9	57.1	23.0	29.6
MAX	45	44	125	155	105	385	627	298	218	108	60	63
MIN	11	17	26	53	40	53	128	60	32	25	14	14
CFSM	640	664	1,552	1,844	1,227	3,337	6,590	4,220	1,801	1,222	449	663
IN.	646	671	1,675	2,112	1,337	3,888	7,277	4,885	2,002	1,440	456	670

CAL YR 1971 TOTAL 24,509.7 MEAN 67.1 MAX 513 MIN 5.5 CFSM 1,423 IN 19.44
 WTR YR 1972 TOTAL 34,178.0 MEAN 93.4 MAX 627 MIN 11 CFSM 1,999 IN 27.11

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

41

01085000 Contoosick River near Henniker, N.H.

LOCATION.--Lat 43°09'10", long 71°51'24", Merrimack County, on right bank 1.6 miles downstream from Sand Brook and 2.5 miles southwest of Henniker.

DRAINAGE AREA.--368 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 475 ft (from topographic map). Prior to Dec. 18, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 616 cfs (22.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,120 cfs Apr. 21 (gage height, 10.72 ft); minimum daily, 73 cfs Sept. 13.

Period of record: Maximum discharge, 9,460 cfs June 26, 1944 (gage height, 13.13 ft); minimum daily, 19 cfs Oct. 29, 1940, July 17, 1965.

Maximum stage since at least 1760, 21.3 ft Sept. 21, 1938, from floodmarks (discharge, 22,200 cfs, from rating curve extended above 7,500 cfs on basis of computations of flow over dams at gage heights 12.72 and 21.3 ft).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir (see p. 47) since March 1950, Highland Lake, Lake Franklin Pierce, and other reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1701: 1944(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	173	279	548	470	490	953	2,380	1,840	1,010	144	134
2	95	231	388	548	400	780	1,230	2,378	1,420	690	170	115
3	92	235	308	628	370	868	1,570	2,340	1,680	848	166	162
4	136	224	250	500	400	1,000	1,580	2,928	1,340	955	168	93
5	145	187	220	690	540	1,020	1,330	3,230	1,140	712	114	88
6	146	167	278	608	560	941	1,310	2,460	855	697	112	93
7	104	199	310	680	470	781	1,270	2,350	717	688	106	108
8	121	193	328	648	420	612	1,140	2,110	674	584	112	93
9	113	215	330	480	390	440	1,100	2,300	888	471	122	84
10	110	218	347	680	370	636	1,630	2,610	675	324	129	85
11	108	215	354	628	350	610	1,080	2,340	767	148	179	79
12	248	280	575	618	340	577	1,120	2,100	470	116	141	74
13	230	176	585	600	330	549	1,240	1,760	545	122	124	73
14	303	154	548	640	450	554	1,900	1,520	474	295	188	84
15	278	197	503	660	820	475	1,880	1,490	414	249	188	111
16	158	243	474	600	780	513	1,850	2,220	708	247	167	100
17	143	391	653	560	768	701	2,890	2,240	384	357	123	95
18	182	392	660	530	708	1,508	4,040	2,050	372	340	123	105
19	260	207	520	510	600	2,060	4,380	1,770	345	294	123	112
20	224	153	580	490	580	2,110	4,820	1,570	425	245	100	130
21	231	97	540	460	560	1,450	4,930	1,570	340	239	104	111
22	232	105	500	450	520	1,640	4,350	1,500	491	214	93	100
23	155	208	520	450	500	2,280	4,340	1,090	395	224	104	92
24	124	153	440	470	480	2,550	4,650	931	718	280	133	84
25	188	148	440	520	460	2,440	4,640	758	1,810	424	129	81
26	231	148	750	600	450	2,190	4,210	681	1,150	328	86	78
27	244	163	734	580	440	1,870	3,640	583	1,160	292	84	96
28	239	147	667	528	430	1,530	3,010	491	1,020	364	132	88
29	239	211	488	470	440	1,400	2,510	450	778	299	160	88
30	172	274	582	428	-----	1,340	2,440	645	744	173	164	98
31	128	-----	590	440	-----	1,240	-----	645	-----	140	154	-----
TOTAL	4,591	6,062	14,811	16,080	14,380	37,597	76,373	53,644	23,056	11,962	4,117	2,464
MEAN	180	252	478	519	493	1,213	2,546	1,732	769	386	133	95.5
MAX	303	392	750	660	820	2,550	4,930	3,230	1,620	1,010	188	134
MIN	92	97	220	400	330	475	953	450	349	116	84	73
CFSM	.49	.55	1.30	1.41	1.34	3.30	6.42	4.71	2.09	1.05	.34	.26
IN.	.57	.61	1.50	1.63	1.45	3.48	7.72	5.43	2.33	1.21	.42	.29

CAL YR 1971 TOTAL 192,801 MEAN 528 MAX 3,690 MIN 41 CFSM 1.43 IN 19.49

WTR YR 1972 TOTAL 246,487 MEAN 728 MAX 4,930 MIN 73 CFSM 1.98 IN 24.94

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

01085500 Contoocook River below Hopkinton Dam, at West Hopkinton, N.H.

LOCATION.--Lat 43°11'31", long 71°44'51", Merrimack County, on right bank 400 ft downstream from covered bridge at West Hopkinton, 0.2 mile downstream from Hopkinton Dam, and 5.9 miles upstream from Warner River.

DRAINAGE AREA.--427 sq mi.

PERIOD OF RECORD.--August 1903 to April 1907 (no winter records), August 1963 to current year. Published as "at West Hopkinton" 1903-7.

GAGE.--Water-stage recorder. Altitude of gage is 355 ft (from topographic map). August 1903 to April 1907, nonrecording gage at site 400 ft upstream at different datum.

AVERAGE DISCHARGE.--9 years (1963-72), 625 cfs (19.88 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 5,140 cfs Apr. 21 (gage height, 8.52 ft); minimum daily, 44 cfs Oct. 3.

Period of record: Maximum discharge, 5,260 cfs Apr. 24, 1969 (gage height, 8.66 ft); minimum daily, 15 cfs July 22, 1965.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir since 1950, Highland Lake, Lake Franklin Pierce, Hopkinton Lake since 1962 (see p. 67), and other reservoirs above station. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River during periods of high flow in March 1968 and April 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	110	334	630	490	540	1,140	2,600	1,060	1,070	165	149
2	87	236	324	620	470	400	1,240	2,550	1,720	862	155	130
3	44	225	351	560	450	920	1,810	2,560	1,660	706	217	58
4	113	244	351	560	500	1,100	1,810	2,930	1,450	943	199	89
5	195	417	265	580	600	1,200	1,540	2,740	1,200	868	155	139
6	130	139	212	540	620	1,100	1,550	2,600	946	718	122	51
7	171	175	277	540	550	1,000	1,520	2,610	809	724	145	75
8	46	186	346	490	490	660	1,410	2,470	663	640	136	116
9	149	265	341	450	450	720	1,250	2,440	866	514	130	110
10	105	199	369	490	430	720	1,240	2,280	729	393	178	73
11	199	233	416	660	410	640	1,270	2,220	771	269	145	87
12	229	217	518	640	390	610	1,330	2,610	715	158	192	105
13	265	199	693	660	380	600	1,450	2,190	611	206	152	57
14	261	149	621	700	520	500	2,000	1,750	532	171	158	69
15	286	178	573	720	910	580	2,180	1,820	468	295	236	97
16	261	265	535	680	850	560	2,130	2,410	422	295	192	130
17	136	323	672	660	820	760	2,530	2,450	421	352	171	100
18	127	414	760	620	780	1,400	3,460	2,200	395	419	125	66
19	269	314	580	580	700	2,000	4,030	1,920	383	362	149	105
20	217	189	570	550	640	2,400	4,530	1,690	480	327	136	133
21	214	125	560	540	660	2,200	4,990	1,680	376	257	113	142
22	236	133	560	540	620	2,050	5,000	1,650	521	265	113	130
23	229	295	520	530	580	2,720	4,800	1,180	445	260	116	113
24	110	158	490	490	560	3,010	4,830	1,040	746	370	116	53
25	122	161	550	540	540	2,930	4,990	884	1,130	500	171	125
26	233	149	780	700	530	2,760	4,800	731	1,150	420	122	69
27	244	210	780	650	520	2,410	3,890	676	1,300	269	69	71
28	248	175	720	600	500	1,980	3,370	550	1,150	347	110	110
29	225	192	700	560	500	1,710	2,940	524	962	291	165	80
30	236	319	680	520	-----	1,600	2,700	512	742	199	155	105
31	133	-----	560	520	-----	1,530	-----	529	-----	199	155	-----
TOTAL	5,580	6,344	16,008	18,120	16,460	43,710	81,890	57,006	24,823	13,669	4,663	2,937
MEAN	180	211	516	585	568	1,410	2,730	1,839	827	441	150	97.9
MAX	296	414	780	720	910	3,010	5,000	2,930	1,720	1,070	236	149
MIN	44	110	212	450	380	540	1,140	512	376	158	69	51
MEAN†	182	215	521	586	568	1,409	2,731	1,834	826	439	146	96.0
CFSM†	.43	.50	1.22	1.37	1.33	3.30	6.40	4.30	1.93	1.03	.34	.22
IN.†	.49	.56	1.41	1.58	1.44	3.81	7.14	4.95	2.16	1.19	.40	.25

CAL YR 1971 TOTAL 206,474 MEAN 566 MAX 3,870 MIN 20 MEAN† 566 CFSM† 1.33 IN† 17.99
 #IF YR 1972 TOTAL 291,210 MEAN 796 MAX 5,000 MIN 44 MEAN† 796 CFSM† 1.86 IN† 25.37

† Adjusted for change in contents in Hopkinton Lake.

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

43

01085800 West Branch Warner River near Bradford, N.H.

LOCATION.--Lat 43°15'33", long 72°01'35", Merrimack County, on left bank 75 ft downstream from small right-bank tributary, 200 ft upstream from highway bridge, and 3.5 miles west of Bradford.

DRAINAGE AREA.--5.75 sq mi.

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 10.1 cfs (23.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 208 cfs Apr. 19 (gage height, 6.74 ft), from rating curve extended above 130 cfs; minimum, 0.48 cfs Sept. 13.

Period of record: Maximum discharge, 481 cfs Apr. 10, 1969 (gage height, 8.23 ft), from rating curve extended above 130 cfs; minimum, about 0.06 cfs about Sept. 20, 1964.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	2.0	5.3	5.7	4.4	9.0	14	99	58	40	1.5	.82
2	6.4	2.0	4.1	5.4	4.2	16	18	80	23	25	1.3	.74
3	6.5	2.2	3.5	6.0	4.0	16	19	86	13	35	1.6	.74
4	6.4	2.3	3.1	5.5	20	14	16	106	11	25	1.7	.74
5	6.1	2.1	2.6	5.0	18	10	15	71	10	17	1.3	.74
6												
7	6.1	1.9	2.4	4.7	7.8	9.0	15	48	8.0	10	1.1	.66
8	6.1	1.6	7.2	4.7	6.4	8.0	14	44	7.5	8.0	1.1	.62
9	6.1	4.7	8.6	4.1	5.6	7.6	13	37	7.0	15	1.1	.51
10	6.1	3.3	6.6	4.5	4.0	7.3	12	68	7.4	10	1.0	.51
11	12	2.2	10	12	4.5	7.0	14	41	6.5	8.0	1.1	.51
12												
13	15	2.6	22	10	4.0	6.6	17	35	5.5	20	1.0	.51
14	6.6	2.5	18	9.2	3.8	6.4	22	32	4.6	10	1.0	.51
15	3.6	2.5	13	8.7	9.5	6.2	24	24	3.0	8.0	.86	.54
16	2.7	2.2	9.8	25	50	8.0	38	20	3.6	6.0	.86	1.5
17	2.1	2.1	8.6	18	20	8.5	31	55	3.2	4.3	1.1	1.6
18												
19	1.8	2.1	15	11	13	6.0	48	45	3.3	3.7	1.0	1.1
20	1.7	2.1	13	9.0	10	35	115	31	3.8	4.8	.96	.82
21	1.6	2.1	10	8.0	9.0	70	99	24	2.9	3.4	.91	.74
22	1.6	2.1	8.0	7.5	7.0	35	127	20	3.0	2.7	.91	.96
23	1.4	2.1	6.5	6.8	6.5	20	111	20	3.5	2.7	.82	1.7
24												
25	1.4	2.1	5.5	6.3	6.0	17	58	25	3.2	2.3	.78	1.1
26	1.5	2.5	4.6	6.0	5.5	30	45	18	7.4	2.2	.70	.96
27	1.5	2.3	4.0	5.8	5.0	66	63	14	51	11	.58	.82
28	1.5	1.9	7.0	5.6	5.0	33	84	12	63	5.4	.54	.74
29	3.4	2.5	15	10	4.0	23	82	11	38	5.0	.54	.70
30												
31	6.0	2.7	10	15	4.8	18	63	8.9	64	3.7	.54	.70
32	3.5	2.5	8.2	8.0	4.7	15	49	8.2	24	3.0	1.3	.70
33	2.8	2.6	9.0	7.0	6.6	14	49	7.1	15	2.6	7.2	.58
34	2.6	3.1	8.0	4.5	4.5	13	75	6.0	10	2.3	2.1	.54
35	2.1	5.6	7.0	5.4	-----	13	86	5.0	24	1.9	1.3	.66
36	2.0	-----	8.0	4.8	-----	13	-----	17	-----	1.6	.96	-----
TOTAL	42.27	77.1	261.6	250.3	257.6	556.6	1,440	1,120.2	488.3	299.6	38.76	24.07
MEAN	2.65	2.57	8.44	8.07	8.88	18.0	48.0	36.1	16.3	9.66	1.25	.80
MAX	15	5.6	22	25	50	70	127	106	64	40	7.2	1.7
MIN	.51	1.9	2.4	4.1	3.8	6.0	12	5.0	2.9	1.6	.54	.51
CFSM	6.6	6.5	1.47	1.40	1.54	3.13	8.35	6.28	2.83	1.68	.22	.14
IN	6.1	5.0	1.69	1.62	1.67	3.60	9.12	7.25	3.16	1.94	.25	.16

CAL YR 1971 TOTAL 3,588.39 MEAN 9.83 MAX 194 MTN .39 CFSM 1.71 IN 21.22
WTR YR 1972 TOTAL 4,896.40 MEAN 13.6 MAX 127 MTN .51 CFSM 2.33 IN 31.68

PEAK DISCHARGE (BASE, 85 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	-	-	190	5-3	2215	6.63	192
4-19	1930	6.74	208	6-1	0745	5.72	92
4-24	1815	6.08	126	6-23	1530	5.96	114
4-30	1830	6.14	132	6-26	0200	6.01	119

† About.

MERRIMACK RIVER BASIN

01086000 Warner River at Davisville, N.H.

LOCATION.--Lat 43°15'06", long 71°43'54", Merrimack County, on left bank 60 ft downstream from bridge on State Highway 127 at Davisville, 2.2 miles northwest of Contoocook, and 2.4 miles upstream from mouth.

DRAINAGE AREA.--146 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (from topographic map). Prior to Dec. 22, 1939, chain gage at bridge 60 ft upstream at same datum.

AVERAGE DISCHARGE.--33 years, 230 cfs (21.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,320 cfs Apr. 21 (gage height, 7.96 ft); minimum, 9.8 cfs Oct. 8, 9.

Period of record: Maximum discharge, 4,510 cfs Mar. 27, 1953 (gage height, 9.88 ft); minimum, 2.6 cfs Aug. 17, 18, 1965.

Flood of September 1938 reached a stage of 12.8 ft, from information by local residents.

REMARKS.--Records good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

REVISIONS (WATER YEARS).-- WSP 1901: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	32	70	116	100	149	471	973	433	285	71	23
2	13	31	65	115	94	221	538	1,000	671	310	62	21
3	12	31	66	128	90	265	611	990	550	269	61	20
4	12	32	62	127	120	283	609	1,310	425	281	63	20
5	11	31	53	121	163	277	582	1,390	366	289	57	19
6	11	29	48	99	158	257	561	1,180	316	245	51	18
7	11	31	57	101	150	227	542	958	280	202	46	16
8	10	38	70	96	134	223	496	796	247	167	46	15
9	11	43	75	88	127	207	460	799	232	149	43	15
10	18	43	82	113	116	188	449	879	217	134	43	14
11	91	42	121	140	108	182	481	752	194	125	40	13
12	93	43	162	148	102	172	509	668	166	147	36	13
13	63	43	160	145	104	164	617	594	143	133	35	13
14	46	40	142	164	208	159	780	520	127	124	33	15
15	36	37	131	199	286	155	829	572	113	106	31	18
16	30	36	135	177	305	163	844	773	107	106	29	19
17	26	34	178	138	303	222	1,280	725	115	99	28	19
18	23	34	165	139	277	511	1,820	624	103	97	28	20
19	21	33	125	137	250	868	1,910	539	94	128	29	19
20	20	32	137	132	230	793	2,170	480	96	313	27	21
21	19	32	136	127	214	708	2,170	475	95	234	24	22
22	22	35	124	115	200	658	1,760	457	94	208	24	22
23	24	38	96	116	176	1,000	1,580	403	147	215	20	19
24	25	31	111	114	170	1,170	1,560	355	310	231	19	18
25	32	30	150	125	164	1,100	1,580	310	477	243	19	17
26	38	36	163	155	151	932	1,450	274	471	199	20	16
27	41	44	162	150	144	761	1,270	246	439	158	18	15
28	38	44	147	146	143	643	1,080	220	379	130	23	13
29	36	43	146	130	141	561	976	189	308	114	36	13
30	32	56	134	119	-----	532	957	171	258	99	35	13
31	29	-----	119	111	-----	502	-----	176	-----	81	27	-----
TOTAL	908	1,104	3,592	4,031	4,928	14,253	30,942	19,798	7,973	5,621	1,124	519
MEAN	29.3	36.8	116	130	170	460	1,031	639	266	181	36.3	17.3
MAX	93	56	178	199	305	1,170	2,170	1,390	671	313	71	23
MIN	10	29	48	88	90	149	449	171	94	81	18	13
CFSM	.20	.25	.79	.89	1.16	3.15	7.06	4.38	1.82	1.24	.25	.12
IN.	.23	.28	.92	1.03	1.26	3.63	7.88	5.04	2.03	1.43	.29	.13

CAL YR 1971 TOTAL 68,448.9 MEAN 188 MAX 1,580 MIN 8.3 CFSM 1.29 IN 17.44
WTR YR 1972 TOTAL 94,793.0 MEAN 259 MAX 2,170 MIN 10 CFSM 1.77 IN 24.15

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-24	0100	6.65	1200				
4-21	0200	7.96	2320				
5-05	0130	6.97	1440				

MERRIMACK RIVER BASIN

45

01087000 Blackwater River near Webster, N.H.

LOCATION.--Lat 43°17'45", long 71°41'46", Merrimack County, on left bank 0.2 mile west of Dingit Corner, 2.4 miles downstream from Blackwater Dam, 2.5 miles southeast of Webster, and 6.5 miles upstream from mouth.

DRAINAGE AREA.--129 sq mi.

PERIOD OF RECORD.--May 1918 to September 1920, February 1927 to current year. Published as "near Contoocook" 1918-20, 1927-35. Records published for both sites October 1934 to September 1935.

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map). Prior to Oct. 1, 1935, chain gage at site 5 miles downstream at different datum.

AVERAGE DISCHARGE.--47 years, 208 cfs (21.90 inches per year), adjusted to present site.

EXTREMES.--Current year: Maximum discharge, 1,650 cfs Apr. 21 (gage height, 6.37 ft); minimum, 20 cfs Oct. 8, 9.
Period of record: Maximum discharge, 11,000 cfs Mar. 19, 1936 (gage height, 11.78 ft, from floodmarks), from rating curve extended above 6,700 cfs on basis of slope-area and critical-depth measurements of peak flow; minimum, 3 cfs Sept. 17, 1941; minimum daily, 7.6 cfs Sept. 29, 1964.
Maximum discharge since construction of Blackwater Reservoir in 1941, 2,390 cfs Apr. 16, 1951, Apr. 10, 1952 (gage height, 7.18 ft).
Maximum stage since at least 1733, that of Mar. 19, 1936.

REMARKS.--Records good. High flow regulated by Blackwater Reservoir since 1941 (see p. 67). Some regulation at low flow prior to 1933 by mill above station.

REVISIONS (WATER YEARS).--WSP 696: Drainage area. WSP 821: 1936(M). WSP 851: 1936. WSP 867: 1936 (flood-report data). WSP 1231: 1919-20, 1927, 1928(M), 1929-32, 1933-34(M), 1936 (calendar-year summaries).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	39	60	115	99	128	404	919	308	189	174	60
2	24	37	52	110	94	148	431	1,070	559	193	161	54
3	23	36	58	112	92	189	490	1,180	639	180	156	50
4	22	36	58	117	105	228	539	1,250	467	186	157	49
5	22	35	56	112	122	238	535	1,100	322	195	146	46
6	22	34	57	104	135	223	513	1,270	259	179	128	44
7	21	35	59	99	130	199	466	1,330	226	152	117	42
8	20	33	67	96	122	179	417	1,280	219	135	111	40
9	20	39	74	95	118	168	375	860	209	136	104	39
10	27	40	84	99	113	158	354	763	195	131	101	39
11	85	42	106	114	108	150	369	712	182	142	96	39
12	134	42	152	121	104	146	399	611	167	260	90	40
13	136	42	197	121	100	141	462	526	151	265	85	42
14	103	42	188	124	120	138	551	465	140	187	81	48
15	80	42	162	142	200	138	580	448	130	155	80	53
16	65	42	148	146	220	141	586	519	124	137	77	56
17	56	41	155	136	210	165	736	559	127	124	74	55
18	50	41	160	126	195	318	1,110	496	130	123	72	52
19	45	41	140	122	185	515	1,450	416	122	224	71	51
20	43	41	126	120	175	685	1,563	359	118	608	68	55
21	39	42	127	117	165	736	1,620	340	117	516	64	56
22	36	46	127	112	160	698	1,550	339	114	392	59	55
23	34	49	109	106	150	650	1,210	319	127	334	56	52
24	33	42	107	105	145	810	1,053	281	208	375	53	48
25	33	41	122	108	140	929	1,100	247	325	531	50	44
26	41	46	138	124	136	880	1,193	216	387	557	48	42
27	43	50	142	131	131	882	1,120	194	335	423	46	41
28	44	55	135	131	131	532	930	178	272	311	73	40
29	46	53	129	121	128	458	787	159	219	260	93	38
30	45	58	124	112	-----	429	791	148	189	222	85	36
31	42	-----	117	106	-----	413	-----	149	-----	190	71	-----
TOTAL	1,456	1,267	3,536	3,604	4,033	11,652	23,675	18,703	7,087	8,012	2,847	1,406
MEAN	47.0	42.2	114	116	139	376	789	633	236	258	91.8	46.9
MAX	136	58	197	146	220	929	1,620	1,330	639	608	174	60
MIN	20	34	52	95	92	128	354	148	114	123	46	36
CFSM	.36	.33	.88	.93	1.08	2.91	6.12	4.67	1.83	2.00	.71	.36
IN.	.42	.37	1.02	1.04	1.16	3.36	6.83	5.39	2.04	2.31	.82	.41

CAL YR 1971 TOTAL 60,486 MEAN 167 MAX 1,450 MIN 20 CFSM 1.29 IN 17.59
WTR YR 1972 TOTAL 87,278 MEAN 238 MAX 1,620 MIN 20 CFSM 1.85 IN 25.17

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

01088000 Contoocook River at Penacook, N.H.

LOCATION.--Lat 43°17'12", long 71°35'56", Merrimack County, on right bank at Penacook, 0.5 mile upstream from mouth.

DRAINAGE AREA.--766 sq mi.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 273.09 ft above mean sea level.

AVERAGE DISCHARGE.--44 years, 1,236 cfs (21.91 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 9,310 cfs Apr. 21 (gage height, 6.15 ft); minimum, 109 cfs Oct. 9; minimum daily, 142 cfs Oct. 4.
 Period of record: Maximum discharge, 46,800 cfs Mar. 20, 1936 (gage height, 14.26 ft, from floodmarks); minimum, 18 cfs Sept. 7, 1968; minimum daily, 57 cfs Oct. 12, 1964, Aug. 16, 1965. Maximum discharge since construction of Hopkinton and Everett Dams in 1962, 10,300 cfs Apr. 25, 1969 (gage height, 6.29 ft).
 Stage and discharge of flood of Mar. 20, 1936, are the greatest since at least 1725.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Nubanusit Lake, Edward MacDowell Reservoir since 1950, Highland Lake, Lake Franklin Pierce, Hopkinton Lake since 1962, Blackwater Reservoir since 1941 (see p. 67), and other reservoirs above station. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River at times during periods of high flow in March 1968 and April 1969.

REVISIONS (WATER YEARS).--WSP 756: 1933(M), drainage area. WSP 1231: 1929, 1931. WSP 1901: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	240	510	1,110	880	850	2,470	4,860	1,710	1,550	564	296
2	192	319	540	1,050	440	1,050	2,550	4,950	3,140	1,590	528	264
3	171	371	540	960	800	1,430	3,200	5,110	3,250	1,260	494	238
4	162	365	540	920	900	1,600	3,430	5,650	2,530	1,470	502	219
5	235	354	450	950	1,050	1,740	3,210	6,000	2,230	1,530	478	210
6	226	302	410	950	1,100	1,650	3,100	5,360	1,430	1,230	402	219
7	245	297	430	920	1,000	1,450	3,010	5,400	1,530	1,190	349	196
8	210	275	500	880	900	1,250	2,760	5,090	1,320	1,030	336	192
9	171	353	529	800	820	1,200	2,470	4,740	1,400	906	331	196
10	245	354	572	900	780	1,150	2,360	4,470	1,330	755	336	192
11	354	371	655	1,100	740	1,100	2,420	4,180	1,260	650	331	184
12	481	365	768	1,060	700	1,040	2,520	4,380	1,220	630	313	184
13	529	353	1,040	1,100	840	1,020	3,000	3,930	1,050	840	314	188
14	401	319	1,020	1,100	1,000	960	3,750	3,220	943	610	313	196
15	449	291	953	1,200	1,300	921	4,240	3,120	846	555	354	196
16	444	354	917	1,150	1,500	961	4,170	3,990	755	564	360	205
17	335	402	990	1,100	1,500	1,150	4,950	4,290	744	620	331	210
18	265	521	1,150	1,050	1,350	1,960	6,610	3,890	711	690	296	205
19	335	449	940	1,000	1,250	3,100	7,650	3,390	690	755	280	210
20	371	330	950	940	1,150	3,950	8,520	2,960	744	1,390	285	224
21	341	291	950	900	1,150	3,960	9,190	2,840	690	1,320	264	229
22	353	260	950	880	1,050	3,580	9,060	2,780	744	1,100	248	248
23	341	395	900	893	1,000	4,210	8,480	2,290	822	995	238	219
24	270	324	820	834	960	5,160	8,070	1,910	1,140	1,020	234	210
25	240	302	820	941	920	5,360	8,050	1,690	1,880	1,240	229	192
26	330	297	1,150	1,150	900	5,150	7,990	1,410	2,150	1,440	248	188
27	377	330	1,210	1,150	880	4,580	7,190	1,270	2,210	1,140	229	180
28	383	347	1,100	1,100	870	3,750	6,150	1,110	1,950	969	229	171
29	383	335	1,000	1,000	860	3,240	5,360	995	1,650	870	269	175
30	371	451	1,000	940	-----	3,040	4,930	936	1,290	680	331	175
31	302	-----	990	940	-----	2,880	-----	943	-----	610	319	-----
TOTAL	9,404	10,372	25,294	30,988	28,830	74,482	150,920	107,148	44,059	31,059	10,339	6,211
MEAN	316	346	816	1,000	994	2,403	5,031	3,456	1,469	1,002	334	207
MAX	529	521	1,210	1,200	1,500	5,360	9,190	6,000	3,250	1,590	564	296
MIN	142	240	410	800	680	870	2,360	930	690	555	229	171
CFSM	4.1	4.5	1.07	1.31	1.30	3.14	6.57	4.51	1.92	1.31	4.4	2.7
IN	4.4	5.0	1.23	1.50	1.40	3.82	7.33	5.20	2.14	1.51	5.0	3.0
CAL YR 1971 TOTAL	381,422											
MEAN	1,045											
MAX	7,290											
MIN	93											
CFSM	1.36											
IN	18.52											
WTR YR 1972 TOTAL	529,506											
MEAN	1,447											
MAX	9,190											
MIN	142											
CFSM	1.89											
IN	25.71											

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

47

01089000 Soucook River near Concord, N.H.

LOCATION.--Lat 43°14'22", long 71°27'44", Merrimack County, on left bank 500 ft upstream from U. S. Highway 4, 0.9 mile upstream from Cemetery Brook, and 4.4 miles northeast of State Capital at Concord.

DRAINAGE AREA.--76.8 sq mi.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 290 ft (from topographic map).

AVERAGE DISCHARGE.--21 years, 107 cfs (18.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 815 cfs Apr. 18 (gage height, 9.05 ft); minimum not determined; minimum daily, 5.1 cfs Oct. 10. Period of record: Maximum discharge, 2,880 cfs Apr. 6, 1960 (gage height, 13.34 ft); minimum, 1.5 cfs Aug. 7, 1965.

REMARKS.--Records good except those for winter period, period of indefinite stage-discharge relation, and period of no gage-height record, which are fair. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1331: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	17	53	54	47	76	310	228	383	79	53	14
2	7.1	18	39	58	44	90	410	218	445	68	49	14
3	6.5	18	38	73	42	130	226	226	258	56	48	15
4	6.0	17	37	73	60	160	428	398	184	99	48	24
5	5.5	17	31	68	100	150	395	393	168	78	42	21
6	6.9	17	28	59	90	130	375	300	140	63	37	17
7	6.3	16	35	60	70	115	350	243	138	56	35	14
8	5.9	17	46	58	60	110	300	208	136	52	36	13
9	5.5	18	46	55	54	105	275	243	126	54	36	13
10	5.1	19	54	62	50	98	280	255	120	46	41	12
11	20	19	74	60	46	92	318	206	111	42	37	11
12	50	20	99	58	45	88	313	184	100	44	32	11
13	52	20	86	56	50	85	403	164	88	41	30	11
14	30	20	73	70	130	82	513	145	76	44	28	13
15	25	19	65	86	180	80	465	224	64	42	28	19
16	20	19	65	72	170	86	480	368	56	39	27	20
17	18	18	77	58	150	100	454	353	65	52	25	16
18	16	18	69	60	120	300	782	273	58	52	23	14
19	15	19	48	64	110	450	719	218	52	42	27	14
20	14	20	55	60	95	400	716	192	48	51	32	22
21	13	20	59	58	90	370	728	214	46	52	30	18
22	12	24	57	56	86	350	563	190	60	81	28	17
23	11	30	47	55	82	450	523	154	90	84	25	15
24	10	25	55	54	78	600	533	133	120	145	23	14
25	13	25	71	58	76	550	498	117	150	196	22	13
26	17	25	67	82	75	450	420	104	110	204	21	12
27	20	28	64	80	74	400	355	95	90	118	19	13
28	20	28	60	70	74	350	308	89	70	87	29	13
29	21	29	60	60	74	320	275	81	60	78	25	13
30	22	49	57	55	-----	300	248	72	57	69	20	14
31	16	-----	54	50	-----	300	-----	81	-----	59	17	-----
TOTAL	497.7	649	1,769	1,940	2,424	7,367	13,409	6,369	3,664	2,263	973	450
MEAN	16.1	21.6	57.1	62.6	83.6	238	447	205	122	73.0	31.4	15.0
MAX	52	49	99	86	180	600	782	398	445	204	53	24
MIN	5.1	16	28	50	42	76	248	72	46	39	17	11
CFSM	.21	.28	.74	.82	1.09	3.10	5.82	2.67	1.59	.95	.41	.20
IN.	.24	.31	.86	.94	1.17	3.57	6.49	3.08	1.78	1.10	.47	.22

CAL YR 1971 TOTAL 34,826.4 MEAN 95.4 MAX 833 MIN 5.1 CFSM 1.24 IN 16.87
WTR YR 1972 TOTAL 41,779.7 MEAN 114 MAX 782 MIN 5.1 CFSM 1.48 IN 20.24

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-18	0930	9.05	815				

NOTE.--No gage-height record Oct. 10 to Nov. 12. Stage-discharge relation indefinite Oct. 1-4, 7, 9.

MERRIMACK RIVER BASIN

01090800 Piscataquog River below Everett Dam, near East Weare, N.H.

LOCATION.--Lat 43°05'29", long 71°39'36", Hillsborough County, on right bank 500 ft downstream from Everett Dam and 1.4 miles southeast of East Weare.

DRAINAGE AREA.--63.1 sq mi.

PERIOD OF RECORD.--March 1963 to current year.

AVERAGE DISCHARGE.--9 years, 84.3 cfs (18.14 inches per year), adjusted for storage and diversion.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 320 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 935 cfs Apr. 19 (gage height, 7.77 ft); minimum daily, 5.0 cfs Oct. 6.

Period of record: Maximum discharge, 1,530 cfs May 1, 1969 (gage height, 8.73 ft); no flow for part of Aug. 27, Nov. 18, 1964, Oct. 22, 1968, caused by unusual regulation; minimum daily discharge, 0.39 cfs Sept. 6, 1968.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Everett Lake (see p. 67). Diversion from Hopkinton Lake on Contoocook River to Everett Lake during periods of high flow in the spring of 1968 and 1969. Occasional regulation by small reservoirs above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	31	40	52	48	76	210	229	270	73	26	21
2	6.8	44	24	63	45	91	260	243	345	73	24	18
3	6.5	100	16	56	48	93	307	252	231	64	22	16
4	5.0	42	16	51	64	97	298	314	160	70	21	14
5	5.4	63	16	51	70	110	286	338	124	65	19	14
6	5.0	76	11	48	70	112	277	293	100	59	17	14
7	7.0	68	8.0	48	86	102	263	250	86	42	16	11
8	6.5	58	8.0	48	60	100	230	223	79	46	17	9.0
9	7.7	81	13	48	68	100	205	299	81	47	18	8.9
10	13	76	24	48	79	108	202	342	74	42	18	8.1
11	47	60	32	59	60	106	227	294	71	36	17	7.7
12	50	47	32	53	51	104	241	267	62	30	15	7.4
13	68	39	37	68	51	79	298	230	55	28	14	7.4
14	62	32	56	65	79	68	440	195	50	35	14	9.8
15	95	28	48	59	118	82	412	224	46	35	13	13
16	39	29	40	59	138	78	403	262	43	39	12	15
17	20	29	56	76	180	84	383	267	42	35	11	14
18	16	29	56	67	175	147	552	177	39	38	11	13
19	24	29	56	71	97	302	841	138	35	35	11	12
20	27	29	56	78	67	287	699	155	34	43	11	12
21	27	29	45	62	91	269	888	213	34	43	10	12
22	27	29	40	54	129	265	741	212	34	37	9.6	12
23	25	29	48	54	98	355	634	173	60	42	8.9	11
24	24	25	40	53	93	244	643	146	125	59	8.5	10
25	27	27	40	53	91	332	637	124	170	48	8.2	9.4
26	29	37	40	65	89	379	388	108	170	52	7.9	8.7
27	28	36	73	71	88	428	396	95	155	52	8.7	8.5
28	29	7.7	69	71	59	416	358	88	162	43	41	8.3
29	29	37	84	71	46	254	315	79	68	37	48	7.6
30	29	57	89	70	-----	234	286	71	63	32	35	7.7
31	30	-----	68	51	-----	219	-----	74	-----	29	26	-----
TOTAL	826.7	1,343.7	1,303.0	1,843	2,438	5,749	12,479	6,379	1,035	1,413	538.8	340.5
MEAN	26.7	44.8	42.0	59.5	84.1	185	416	206	101	45.6	17.4	11.4
MAX	95	100	89	78	180	428	899	342	345	73	48	21
MIN	5.0	7.7	8.0	48	45	68	202	71	34	28	7.9	7.4
MEAN†	27.3	44.6	38.7	59.5	84.1	192	416	204	101	44.7	17.4	10.7
CFSMT	.43	.71	.61	.94	1.33	3.04	6.59	3.23	1.60	.71	.28	.17
IN.†	.50	.79	.71	1.09	1.44	3.51	7.35	3.73	1.79	.82	.32	.19

CAL YR 1971	TOTAL	30,047.3	MEAN	82.3	MAX	825	MIN	4.9	MEAN†	18.7	CFSMT	1.29	IN†	17.59
WTR YR 1972	TOTAL	37,888.7	MEAN	103	MAX	899	MIN	5.0	MEAN†	103	CFSMT	1.63	IN†	22.22

† Adjusted for change in contents in Everett Lake.
NOTE.--No gage-height record Dec. 1-30.

MERRIMACK RIVER BASIN

49

01091000 South Branch Piscataquog River near Goffstown, N.H.

LOCATION.--Lat 43°00'49", long 71°38'31", Hillsborough County, on right bank 20 ft upstream from highway bridge, 1.4 miles upstream from mouth, and 2.2 miles west of Goffstown.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 162 cfs (21.15 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs Apr. 20 (gage height, 6.76 ft); maximum gage height, 8.13 ft Mar. 23 (backwater from ice); minimum discharge, 9.5 cfs Oct. 4, 5, 6.
Period of record: Maximum discharge, 4,100 cfs June 25, 1944 (gage height, 9.47 ft); maximum gage height, 14.33 ft Feb. 11, 1970 (ice jam); minimum discharge, 2.4 cfs Aug. 20-22, 1966.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Prior to 1954, some regulation at low flow by mill above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	29	120	120	96	170	364	373	930	185	33	17
2	11	28	110	130	90	230	508	355	660	160	30	15
3	10	28	100	160	84	320	566	359	377	123	30	18
4	9.9	30	90	140	150	450	526	544	279	126	31	22
5	9.9	33	80	130	190	400	499	517	228	119	28	19
6	12	30	70	120	170	330	472	386	185	106	25	17
7	17	36	90	125	150	300	445	310	175	93	24	14
8	17	40	100	115	130	270	373	289	163	91	29	13
9	15	42	110	110	120	300	334	566	173	100	29	12
10	37	40	120	150	110	250	342	600	190	82	29	11
11	141	38	140	175	100	220	395	436	170	66	26	10
12	84	37	160	170	94	210	422	350	138	59	24	9.7
13	55	36	150	180	120	200	548	296	119	58	22	11
14	43	35	140	200	300	190	742	254	109	86	22	16
15	36	35	130	230	470	180	705	494	100	79	22	21
16	32	36	165	200	420	200	695	710	88	66	20	20
17	28	35	180	160	340	350	1,140	625	88	66	19	17
18	25	34	200	150	260	700	1,270	467	82	72	19	15
19	23	33	165	145	190	900	1,170	377	79	64	20	15
20	19	32	155	140	200	620	1,340	330	79	60	18	15
21	23	31	150	135	180	540	1,220	445	76	54	15	15
22	26	36	150	125	170	520	906	368	86	49	14	15
23	27	48	140	120	160	1,050	1,030	293	231	79	13	14
24	29	51	170	135	150	900	1,040	234	467	89	12	14
25	32	43	200	150	140	720	906	198	431	72	12	14
26	35	75	180	190	130	560	705	173	303	61	11	14
27	39	67	150	150	145	450	590	158	225	55	12	14
28	35	61	135	130	140	400	508	119	180	52	23	13
29	33	55	125	120	135	370	458	115	130	47	30	12
30	30	84	120	110	-----	391	418	111	119	40	26	13
31	27	-----	120	100	-----	346	-----	190	-----	36	21	-----
TOTAL	972.8	1,238	4,215	4,515	5,134	13,037	20,637	11,042	6,660	2,495	689	445.7
MEAN	31.4	41.3	136	146	177	421	688	356	222	80.5	22.2	14.9
MAX	141	84	200	230	470	1,050	1,340	710	930	185	33	22
MIN	9.9	28	70	100	84	170	334	111	76	36	11	9.7
CFSM	.30	.40	1.31	1.40	1.70	4.05	6.62	3.42	2.13	.77	.21	.14
IN.	.35	.44	1.51	1.61	1.84	4.66	7.38	3.95	2.38	.89	.25	.16

CAL YR 1971 TOTAL 50,684.2 MEAN 139 MAX 1,210 MIN 9.5 CFSM 1.34 IN 18.13
WTR YR 1972 TOTAL 71,080.5 MEAN 194 MAX 1,340 MIN 9.7 CFSM 1.87 IN 25.42

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	-	-	†1,100				
4-20	2200	6.76	1,460				
6-1	1400	6.38	1,200				

† About.

NOTE.--No gage-height record Oct. 20 to Nov. 21, Mar. 8-23.

MERRIMACK RIVER BASIN

01091500 Piscataquog River near Goffstown, N.H.

LOCATION.--Lat 43°00'58", long 71°33'03", Hillsborough County, on left bank 300 ft upstream from highway bridge, 0.2 mile upstream from Harry Brook, 0.4 mile southwest of Grasmere, 0.9 mile downstream from Glen Lake, and 2.5 miles east of Goffstown.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 185 ft (from topographic map). Prior to Dec. 22, 1939, staff gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 298 cfs (20.03 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 2,730 cfs Apr. 20 (gage height, 7.71 ft); minimum daily, 9.7 cfs Oct. 20-22.
Period of record: Maximum discharge, 6,840 cfs Apr. 5, 1960 (gage height, 10.85 ft); minimum daily, 2.2 cfs Sept. 7, 1962.
Maximum discharge since at least 1733, 21,900 cfs Sept. 21, 1938 (gage height, 17.52 ft, from floodmarks), by computation of flow over dam.
Flood of Mar. 19, 1936, reached a discharge of 19,900 cfs by computation of flow over dam.

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated by Everett Lake 10 miles upstream since 1962 (see p. 67) and occasionally by Glen Lake since 1966. Prior to October 1966, flow regulated by powerplant at outlet of Glen Lake. Diversion from Hopkinton Lake on Contoocook River to Everett Lake during periods of high flow in the spring of 1968 and 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	51	210	155	155	230	711	724	1,180	302	72	46
2	23	49	185	180	150	370	914	681	1,250	286	68	38
3	21	49	160	246	151	490	1,070	700	796	226	66	41
4	20	48	135	235	250	572	1,040	948	577	230	66	46
5	21	88	115	230	326	533	982	1,000	524	221	58	40
6	23	161	109	200	310	514	937	821	270	194	53	36
7	26	160	118	180	280	480	880	684	180	171	48	32
8	22	158	114	165	260	416	772	606	314	160	51	30
9	21	156	119	160	190	458	689	922	323	181	45	29
10	55	133	136	240	180	442	687	1,120	354	145	59	28
11	192	76	183	280	170	394	757	891	313	124	44	26
12	156	77	241	291	160	342	803	751	260	110	44	23
13	190	77	220	259	188	318	999	657	222	102	44	22
14	306	76	181	352	450	303	1,350	572	189	137	41	23
15	297	76	218	355	647	288	1,380	789	178	137	40	28
16	287	38	242	310	665	310	1,300	1,180	168	119	39	38
17	276	15	344	270	601	435	1,840	1,150	159	108	38	37
18	96	15	300	230	514	936	2,000	846	153	122	37	34
19	10	51	210	227	417	1,270	2,210	672	143	134	33	34
20	9.7	65	180	239	310	1,130	2,550	600	136	151	31	33
21	9.7	66	170	225	270	921	2,440	755	125	138	30	28
22	9.7	80	160	200	255	895	1,980	722	140	119	29	33
23	10	76	150	192	250	1,650	1,940	600	301	164	28	27
24	10	69	190	196	270	1,540	1,960	437	603	194	28	26
25	29	73	305	230	260	1,260	1,770	411	671	162	27	28
26	55	78	298	300	250	1,140	1,430	360	558	159	26	26
27	54	104	272	250	240	1,010	1,110	323	450	146	28	27
28	54	82	286	230	235	968	1,020	277	354	131	28	24
29	53	78	301	210	230	849	861	242	249	113	48	24
30	53	177	220	190	-----	736	802	228	222	98	71	30
31	54	-----	170	170	-----	708	-----	344	-----	79	59	-----
TOTAL	2,465.1	2,502	6,242	7,197	8,634	21,908	39,184	21,013	11,372	4,863	1,379	937
MEAN	79.5	83.4	201	232	298	707	1,306	678	379	157	44.5	31.2
MAX	306	177	344	355	665	1,650	2,550	1,180	1,260	302	72	46
MIN	9.7	15	109	155	150	230	687	228	125	79	26	22
MEAN†	80.2	83.2	198	226	298	713	1,306	676	379	156	44.5	30.6
CFSMT	.40	.41	.98	1.12	1.48	3.53	6.47	3.35	1.88	.77	.22	.15
IN.†	.46	.46	1.13	1.33	1.59	4.07	7.21	3.86	2.10	.89	.25	.17

CAL YR 1971 TOTAL 96,195.1 MEAN 264 MAX 1,940 MIN 9.7 MEAN† 262 CFSMT 1.30 IN† 17.68
WTR YR 1972 TOTAL 127,696.1 MEAN 349 MAX 2,550 MIN 9.7 MEAN† 349 CFSMT 1.73 IN† 23.52

† Adjusted for change in contents in Everett Lake.

MERRIMACK RIVER BASIN

31

01092000 Merrimack River near Goffs Falls, below Manchester, N. H.

LOCATION.--Lat 42°56'54", long 71°27'52", Hillsborough County, on right bank 600 ft upstream from bridge on Interstate Highway 193, 0.8 mile downstream from Bowman Brook, 1.3 miles north of Goffs Falls, and 2.3 miles downstream from Piscataquog River.

DRAINAGE AREA.--3,092 sq mi.

PERIOD OF RECORD.--October 1936 to current year. October 1936 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 109.27 ft above mean sea level.

AVERAGE DISCHARGE.--36 years, 5,122 cfs (22.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 29,200 cfs Apr. 21 (gage height, 10.49 ft); minimum daily, 440 cfs Sept. 15.
Period of record: Maximum discharge, 102,500 cfs Sept. 23, 1938 (gage height, 25.87 ft), from rating curve extended above 48,000 cfs on basis of computations of flow over dam at gage heights 25.87 and 35.19 ft; minimum daily, 98 cfs Oct. 11, 1964.
Maximum discharge since at least 1722, 150,000 cfs Mar. 20, 1936 (gage height, 35.19 ft, from floodmarks), from rating curve extended above 48,000 cfs by method explained above.

REMARKS.--Records excellent. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs above station. See page 67 for description and monthend contents of many of these reservoirs.

REVISIONS (WATER YEARS).--WSP 1231: 1937. WSP 1271: 1937(M, m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,230	1,200	1,920	2,740	3,000	3,390	10,200	17,000	6,770	5,120	3,630	1,800
2	622	1,780	2,050	2,860	2,620	3,870	10,600	18,400	12,100	4,890	3,090	1,590
3	869	1,550	1,960	2,520	2,380	4,240	12,200	20,100	13,400	3,510	2,210	2,240
4	1,260	1,670	1,790	3,010	2,950	5,540	12,800	21,700	11,200	4,020	2,330	1,380
5	1,230	1,390	1,770	2,740	2,900	5,830	12,300	24,800	9,250	5,630	2,330	2,410
6	911	1,600	1,540	2,550	3,080	5,560	11,800	25,200	7,990	6,020	2,180	1,470
7	755	1,510	1,950	2,690	3,290	5,110	11,500	22,700	6,590	3,800	2,680	1,410
8	1,410	1,640	1,880	2,390	3,050	4,770	10,600	20,300	6,540	2,830	1,750	926
9	775	1,800	2,310	2,030	2,940	4,390	9,700	20,300	5,930	3,100	1,770	1,330
10	1,220	1,650	2,650	2,200	2,770	4,200	8,690	18,900	6,280	3,110	1,940	1,000
11	2,500	1,470	2,740	2,560	2,500	3,890	9,020	15,600	5,950	3,130	2,110	1,380
12	3,060	1,890	3,040	2,440	2,410	3,930	9,490	13,600	5,690	3,830	1,860	1,810
13	3,650	1,570	3,400	3,200	2,590	3,690	10,600	12,300	5,620	4,600	2,510	1,190
14	2,590	1,320	3,920	3,050	3,270	3,730	12,900	11,200	4,820	4,410	2,410	1,200
15	2,470	1,490	3,570	3,520	3,970	3,440	13,500	11,600	3,640	3,820	2,230	440
16	2,020	1,370	3,220	3,890	5,070	3,520	13,400	16,300	3,650	3,110	1,140	1,090
17	2,200	1,440	3,420	3,450	5,940	4,510	15,600	18,300	2,760	3,440	1,560	1,280
18	1,520	1,180	3,470	3,290	5,320	7,350	20,200	16,200	3,290	2,770	1,470	2,230
19	1,560	1,350	3,020	3,180	4,890	12,300	23,500	14,300	2,710	2,450	1,190	1,790
20	1,640	1,550	3,120	3,240	4,500	15,300	25,600	13,100	2,670	3,600	1,320	956
21	1,500	1,240	2,920	3,320	4,910	14,300	28,600	12,900	3,270	4,330	1,850	1,370
22	1,530	1,640	2,570	3,130	4,080	12,600	27,200	12,500	3,030	4,340	1,980	1,600
23	1,480	1,380	2,520	2,870	4,020	15,700	24,800	11,100	3,300	4,500	1,380	956
24	1,400	1,670	2,830	2,910	3,420	19,500	23,900	9,630	4,170	5,530	625	2,120
25	1,530	1,410	2,820	2,910	3,040	18,800	23,300	8,420	4,580	7,240	1,120	1,300
26	1,490	1,460	2,880	3,130	3,650	16,300	23,230	7,310	7,090	8,360	1,150	1,400
27	2,130	1,090	3,300	3,240	2,740	14,500	22,000	6,520	6,960	6,790	1,390	1,180
28	2,110	1,620	3,040	3,320	3,240	12,900	19,400	5,500	6,730	5,860	2,130	1,410
29	1,910	1,520	3,610	3,530	2,890	11,300	16,900	4,710	5,870	4,870	3,960	960
30	1,800	2,200	3,110	3,200	-----	11,000	16,000	4,220	5,770	4,720	4,050	1,210
31	1,820	-----	2,790	2,640	-----	10,500	-----	3,890	-----	4,200	3,210	-----
TOTAL	52,192	45,790	85,130	91,770	101,430	265,960	489,500	438,600	177,620	137,950	64,555	42,428
MEAN	1,684	1,526	2,746	2,960	3,498	8,579	16,320	14,150	5,921	4,450	2,082	1,414
MAX	3,650	2,200	3,920	3,890	5,940	19,500	28,600	25,200	13,400	8,360	4,050	2,410
MIN	622	1,090	1,540	2,030	2,380	3,390	8,690	3,890	2,670	2,450	625	440
CFSM	.54	.49	.89	.96	1.13	2.77	5.28	4.58	1.91	1.44	.67	.46
IN.	.63	.55	1.02	1.10	1.22	3.20	5.89	5.28	2.14	1.66	.78	.51

CAL YR 1971 TOTAL 1,598,676 MEAN 4,380 MAX 25,800 MIN 483 CFSM 1.42 IN 19.23
WTR YR 1972 TOTAL 1,992,925 MEAN 5,445 MAX 28,600 MIN 440 CFSM 1.76 IN 23.98

PEAK DISCHARGE (BASE, 22,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-21	1830	10.49	29,200				
5-6	0100	9.74	25,600				

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

01093800 Stony Brook tributary near Temple, N.H.

LOCATION.--Lat 42°51'36", long 71°50'00", Hillsborough County, on left bank 150 ft downstream from highway bridge, 2.9 miles north of Temple, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--3.60 sq mi.

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 6.26 cfs (23.61 inches per year).

EXTREMES.--Current year: Maximum discharge, 114 cfs June 1 (gage height, 5.77 ft); maximum gage height, 6.00 ft Mar. 18 (backwater from ice); minimum discharge, 0.20 cfs Sept. 12, 13.

Period of record: Maximum discharge, 220 cfs Apr. 23, 1969 (gage height, 6.53 ft), from rating curve extended above 90 cfs; maximum gage height, 7.81 ft Feb. 3, 1970 (backwater from ice); minimum discharge, 0.02 cfs Aug. 21, 1966.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	1.1	4.0	5.4	3.5	6.4	12	21	58	9.9	1.5	.38				
2	.42	1.7	5.1	6.8	3.3	11	19	19	6.4	1.4	.37					
3	.39	2.6	2.5	9.6	3.0	18	14	20	12	6.2	1.3	.59				
4	.36	2.1	2.2	6.1	5.0	11	12	33	9.4	9.4	1.4	.73				
5	.40	1.7	2.0	5.4	11	10	12	21	8.7	5.8	1.2	.50				
6	.41	1.5	2.2	5.2	5.6	9.0	11	16	7.3	5.2	1.1	.38				
7	.55	2.2	9.2	4.5	4.5	8.2	11	13	7.6	4.4	1.2	.35				
8	.52	2.6	7.1	4.2	3.8	10	10	17	6.8	4.2	1.3	.33				
9	.98	2.3	4.7	5.0	3.5	8.6	9.1	31	8.1	3.7	.90	.42				
10	7.5	1.8	5.3	12	3.4	7.4	9.4	21	8.8	3.4	.95	.36				
11	5.6	1.6	15	8.5	3.3	6.5	9.6	15	6.7	3.1	.71	.38				
12	2.6	1.7	11	8.1	3.2	5.8	13	13	5.5	2.8	.63	.27				
13	1.9	1.6	9.2	9.2	15	5.6	16	11	5.0	2.6	.62	.20				
14	1.5	1.5	6.2	27	35	5.5	22	9.4	4.5	3.9	.76	.51				
15	1.3	1.4	5.5	14	20	5.7	18	38	3.8	3.5	.98	.97				
16	1.1	1.4	19	10	13	5.9	30	35	3.6	3.2	.73	.66				
17	.97	1.4	15	8.0	9.3	15	59	23	3.6	2.9	.63	.50				
18	.91	1.4	9.0	7.0	7.0	45	49	25	3.3	3.2	.65	.44				
19	.89	1.3	7.0	6.2	6.3	18	59	16	3.1	3.4	.68	.39				
20	.89	1.2	5.5	5.7	5.7	13	60	18	3.2	2.8	.56	.68				
21	.94	1.2	4.8	5.1	5.2	11	37	22	3.1	2.6	.46	.99				
22	.78	1.6	4.3	4.7	4.8	18	29	14	6.3	2.3	.41	.73				
23	.78	1.4	4.0	4.5	4.6	30	49	12	31	2.1	.38	.69				
24	.75	1.4	9.0	4.6	4.4	20	41	9.9	28	3.5	.58	.56				
25	2.3	2.6	15	8.0	4.3	16	35	8.4	16	2.7	.38	.48				
26	2.6	2.3	9.0	7.0	4.2	14	28	7.5	11	4.2	.37	.48				
27	1.8	1.9	6.4	6.0	4.1	12	22	6.5	8.1	3.1	.53	.47				
28	1.5	1.9	6.8	5.0	4.0	11	20	5.8	6.1	2.6	.62	.42				
29	1.3	1.9	6.0	4.5	4.0	10	21	5.1	5.1	2.2	.83	.45				
30	1.2	5.2	4.7	4.0	-----	10	21	4.6	8.4	1.9	.56	.45				
31	1.1	-----	4.2	3.6	-----	9.0	-----	17	-----	1.7	.44	1.0				
TOTAL	44.36	55.4	217.9	224.9	224.1	383.6	754.1	528.2	311.1	118.9	25.51	15.78				
MEAN	1.43	1.85	7.03	7.25	7.04	12.4	25.1	17.0	10.4	3.84	.82	.53				
MAX	7.5	9.2	19	27	35	45	60	38	58	9.9	1.6	1.0				
MIN	.36	1.1	2.0	3.6	3.0	5.5	9.1	4.6	3.1	1.7	.35	.20				
CFSM	.40	.51	1.95	2.01	1.94	3.44	6.97	4.72	2.89	1.07	.23	.15				
IN	.46	.57	2.25	2.32	2.11	3.96	7.79	5.46	3.21	1.23	.26	.16				

FAL YR 1971 TOTAL 2,047.63 MEAN 5.61 MAX 61 MIN .13 CFSM 1.56 IN 21.16
 WTR YR 1972 TOTAL 2,883.85 MEAN 7.88 MAX 60 MIN .20 CFSM 2.19 IN 29.80

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-01	0530	5.77	114				

NOTE.--No gage-height record July 9 to Aug. 8.

MERRIMACK RIVER BASIN

50

01094000 Souhegan River at Merrimack, N.H.

LOCATION.--Lat 42°51'27", long 71°30'24", Hillsborough County, on left bank at head of Wildcat Falls at Merrimack, 0.4 mile upstream from bridge on Everett Turnpike, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--July 1909 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.58 ft above mean sea level (levels by Corps of Engineers). Prior to Apr. 12, 1911, nonrecording gage at site 300 ft downstream at datum 0.38 ft lower. Apr. 12, 1911, to Oct. 14, 1913, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--63 years, 280 cfs (22.24 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,510 cfs Mar. 23 (gage height, 6.75 ft); minimum, 20 cfs Oct. 9, 10.
Period of record: Maximum discharge, 16,900 cfs Mar. 19, 1936 (gage height, 16.2 ft), from rating curve extended above 7,300 cfs on basis of velocity-area studies and computation of flow over dam at gage height 12.78 ft; minimum, 3.8 cfs Aug. 17, Sept. 8, Oct. 1, 1945.
Stage and discharge of the flood of Mar. 19, 1936, are the greatest since 1830.

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill above station. Diversion to Pennichuck Brook basin for municipal supply of Nashua during periods of low flow from August 1965 to October 1966, and July 1969 to November 1971. High flow slightly affected by retarding reservoirs since 1963. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 431: 1909-14. WSP 726: Drainage area. WSP 781: 1924(M). WSP 1231: 1914-15(M), 1917(M), 1919-23(M), 1927-28(M), 1929, 1930-34(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	34	200	190	160	265	803	654	887	361	75	54
2	33	42	180	214	154	413	801	598	1,110	276	72	41
3	31	60	141	271	149	568	897	588	768	325	74	55
4	29	79	136	296	203	822	856	889	569	366	57	57
5	28	90	104	277	346	759	812	965	459			
6	24	73	91	216	314	601	752	779	377	265	51	55
7	24	62	103	194	288	485	719	638	325	231	57	47
8	22	72	155	193	238	470	623	565	294	205	61	45
9	21	74	174	163	213	480	559	834	102	221	55	36
10	27	57	158	262	193	430	545	970	393	196	69	43
11	136	67	175	414	172	404	583	785	405	167	61	31
12	149	65	301	349	160	378	593	644	313	151	55	40
13	102	64	293	352	170	352	719	545	265	142	50	30
14	60	54	250	443	540	343	1,050	484	234	156	46	32
15	66	67	222	524	839	300	1,090	697	214	162	57	45
16	54	63	265	383	794	345	1,000	1,160	199	141	52	33
17	52	63	460	239	599	483	1,463	1,170	187	130	50	42
18	44	57	403	223	473	1,250	1,730	945	178	123	47	30
19	43	55	275	256	354	1,580	1,570	801	173	115	46	33
20	41	55	260	250	288	1,150	1,710	697	164	141	43	37
21	36	52	230	239	280	949	1,940	878	164	162	37	47
22	33	61	190	214	265	890	1,530	774	167	134	46	43
23	31	76	135	218	250	1,810	1,510	608	306	136	32	42
24	30	69	188	224	260	1,620	1,590	554	763	167	33	31
25	40	57	395	252	250	1,270	1,360	417	752	142	41	35
26	55	56	420	338	250	1,010	1,170	353	573	134	31	41
27	59	94	360	284	245	845	1,030	313	450	120	33	30
28	55	90	304	236	245	657	918	287	345	110	55	42
29	51	87	322	198	250	654	818	258	269	100	94	30
30	47	146	281	186	-----	713	724	234	234	90	79	41
31	41	-----	160	176	-----	633	-----	221	-----	88	63	-----
TOTAL	1,524	2,031	7,328	8,313	8,932	23,010	31,262	20,289	11,839	5,574	1,702	1,217
MEAN	49.2	67.7	236	268	308	742	1,042	654	395	180	54.9	40.6
MAX	149	145	460	524	839	1,810	1,940	1,170	1,110	377	94	57
MIN	21	39	91	163	149	265	545	221	164	88	31	30
MEAN†	51.6	70.5	236	268	308	742	1,042	654	395	180	54.9	40.6
CFSM†	.30	.41	1.38	1.57	1.80	4.34	6.09	3.82	2.31	1.05	.32	.24
IN.†	.35	.46	1.59	1.81	1.94	9.01	6.80	4.41	2.58	1.21	.37	.26
CAL YR 1971	TOTAL 87,415	MEAN 239	MAX 1,760	MIN 16	MEAN† 240	CFSM† 1.40	INT† 19.09					
WTR YR 1972	TOTAL 123,021	MEAN 336	MAX 1,940	MIN 21	MEAN† 337	CFSM† 1.97	INT† 26.80					

PEAK DISCHARGE (BASE, 2,250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	2230	6.75	2,510				

† Adjusted for diversion to Pennichuck Brook basin for municipal supply of Nashua. Record of diversion furnished by Pennichuck Water Works.

MERRIMACK RIVER BASIN

01094300 North Nashua River near Leominster, Mass.

LOCATION.--Lat 42°30'06", long 71°43'23", Worcester County, on right bank 1.3 miles upstream from Wakepike Brook, 2.5 miles southeast of Leominster, and 6.1 miles upstream from confluence with South Branch Nashua River.

DRAINAGE AREA.--107 sq mi.

PERIOD OF RECORD.--September 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.04 ft above mean sea level.

AVERAGE DISCHARGE.--37 years, 190 cfs (24.11 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,420 cfs Mar. 23 (gage height, 5.20 ft); minimum, 39 cfs Oct. 3; minimum daily, 44 cfs Oct. 3. Period of record: Maximum discharge, 16,300 cfs Mar. 18, 1936 (gage height, 20.53 ft, from floodmarks), by computation of flow over dam; minimum, 11 cfs Aug. 29, 1948; minimum daily, 22 cfs Sept. 27, 1936, Sept. 2, 1957. Maximum discharge since at least 1850, that of Mar. 18, 1936.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Regulation at low flow by mills above station. Diversion to basin above station for municipal supplies: from Ashby Reservoir since 1916 and from Mose Meadow Reservoir since 1955, for Fitchburg; from Wachusett Reservoir since 1966 and the southeast well field since 1958, for Leominster.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	59	240	190	135	227	395	288	777	333	85	66
2	50	100	230	193	180	282	504	296	542	250	82	64
3	44	160	150	240	140	734	501	342	371	255	78	70
4	50	130	140	204	290	627	478	703	336	255	76	110
5	56	110	105	209	270	429	439	616	383	224	74	90
6	70	90	100	171	230	330	407	468	319	207	73	80
7	73	95	120	166	210	279	423	380	302	136	72	72
8	59	110	200	153	190	420	362	346	250	217	80	69
9	51	100	170	147	170	300	325	539	342	245	86	71
10	221	88	150	356	150	290	325	577	692	164	100	63
11	186	80	200	310	140	247	336	461	481	138	90	59
12	99	74	250	279	130	229	339	389	359	126	80	62
13	75	68	150	290	150	242	454	322	296	155	74	65
14	71	62	170	360	300	237	674	282	247	169	70	88
15	66	58	200	320	270	247	616	605	214	136	85	80
16	61	56	370	250	345	271	521	741	207	116	74	66
17	56	68	300	220	242	648	1,310	757	212	114	69	60
18	61	62	250	170	192	1,150	1,020	553	180	107	68	64
19	61	56	230	160	175	883	837	481	187	171	74	94
20	59	56	200	180	199	609	946	491	187	187	70	87
21	59	55	180	173	185	474	964	591	175	140	69	74
22	57	100	170	160	175	753	715	471	247	116	68	74
23	56	94	160	180	142	1,250	853	380	435	126	68	67
24	49	46	200	200	151	879	785	313	398	120	67	62
25	124	82	300	270	147	663	623	266	316	110	66	63
26	93	90	270	250	147	511	518	232	302	101	66	70
27	75	84	230	210	147	439	458	212	279	97	74	70
28	68	90	270	190	151	399	386	190	229	97	80	66
29	66	120	250	170	157	407	342	173	190	87	82	67
30	59	300	230	140	-----	468	307	164	302	78	74	75
31	56	-----	200	150	-----	369	-----	252	-----	80	68	-----
TOTAL	2,261	2,783	6,375	6,647	5,520	15,383	16,867	12,883	9,757	4,857	2,342	2,168
MEAN	73.6	92.8	206	214	190	496	542	416	325	157	75.5	72.3
MAX	221	300	370	360	370	1,250	1,020	757	777	333	100	110
MIN	44	55	100	147	130	227	307	164	175	78	66	59
MEAN†	66.0	89.6	201	210	189	496	562	414	323	156	72.9	61.4
CFSM†	.62	.84	1.88	1.96	1.77	4.64	5.25	3.87	3.02	1.46	.68	.57
IN.†	.71	.93	2.16	2.26	1.90	5.35	5.86	4.46	3.37	1.68	.79	.64

CAL YR 1971 TOTAL 62,764 MEAN 172 MAX 1,020 MIN 42 MEAN† 167 CFSM† 1.56 IN† 21.18
WTR YR 1972 TOTAL 67,865 MEAN 240 MAX 1,250 MIN 44 MEAN† 237 CFSM† 2.21 IN† 30.12

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	1845	4.89	1,270	4-20	2045	4.61	1,140
3-23	0015	5.20	1,420	5-16	2230	4.39	1,040
4-17	1430	4.66	1,160				

† Adjusted for diversion for municipal supply of Fitchburg and Leominster; records furnished by municipalities.

NOTE.--No gage-height record Nov. 2 to Jan. 3, Jan. 13 to Feb. 13, Aug. 1 to Sept. 7.

MERRIMACK RIVER BASIN

55

01093500 South Branch Nashua River at Clinton, Mass.

LOCATION.--Lat 42°24'12", long 71°41'19", Worcester County, at Wachusett Dam, 1 mile south of Clinton.

DRAINAGE AREA.--107.69 sq mi since July 1937.

PERIOD OF RECORD.--July 1896 to current year.

AVERAGE DISCHARGE.--76 years, 186 cfs (23.45 inches per year), adjusted to present drainage area.

REMARKS.--Flow regulated by Wachusett Reservoir and several ponds. Records adjusted for change in contents in and wastage from Wachusett Reservoir and diversions from Ware River and Quabbin Reservoir on Swift River. Entire flow, except wastage, diverted for use of Boston metropolitan district.

COOPERATION.--Records furnished by Water Division of Metropolitan District Commission.

REVISIONS (WATER YEARS).--WSP 1051: 1928.

MONTHLY DISCHARGE AND RAINFALL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October.....	717.3	0.214	0.33	0.38	3.22
November.....	1,053.7	.326	.50	.56	5.23
December.....	1,972.4	.591	.91	1.05	3.12
Calendar year 1971.....	34,538.9	.879	1.36	18.45	43.25
January.....	4,765.0	1.409	2.18	2.51	3.41
February.....	4,236.6	1.356	2.10	2.26	5.30
March.....	13,312.5	3.980	6.17	7.11	7.98
April.....	11,255.6	3.484	5.39	6.01	4.07
May.....	9,513.7	2.850	4.41	5.08	8.04
June.....	7,372.6	2.282	3.53	3.94	6.42
July.....	3,140.5	.941	1.46	1.68	3.97
August.....	725.0	.217	.34	.39	2.27
September.....	529.7	.164	.25	.28	3.94
Water year 1972.....	58,534.6	1.485	2.30	31.28	55.97

MERRIMACK RIVER BASIN

01096000 Squannacook River near West Groton, Mass.

LOCATION.--Lat 42°38'03", long 71°39'30", Middlesex County, on left bank 0.7 mile downstream from Trout Brook and 2.7 miles northwest of West Groton.

DRAINAGE AREA.--62.8 sq mi, excludes 2.10 sq mi above outlet of Fitchburg Reservoir.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 244.27 ft above mean sea level.

AVERAGE DISCHARGE.--23 years, 106 cfs (22.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 900 cfs Mar. 23 (gage height, 5.25 ft); minimum daily, 8.9 cfs Sept. 11 (caused by unusual regulation).

Period of record: Maximum discharge, 4,010 cfs Oct. 16, 1955 (gage height, 8.04 ft), from rating curve extended above 2,200 cfs; minimum daily, 2.0 cfs Sept. 7, 1965.

REMARKS.--Records good. Occasional regulation at low flow by mill above station; regulation greater prior to 1961. During most years, entire flow from 2.10 sq mi above outlet of Fitchburg Reservoir diverted for municipal supply of Fitchburg; some wastage at times during water years 1964, 1967-72.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	141	93	69	102	243	185	315	185	38	30
2	13	20	92	99	67	155	336	180	373	162	36	36
3	13	57	72	123	66	214	355	194	218	120	34	32
4	12	60	64	126	100	310	347	333	167	117	32	36
5	12	48	52	118	144	276	323	367	165	106	30	35
6	14	39	49	105	130	214	300	261	151	97	28	30
7	26	38	52	96	112	182	288	212	136	89	28	27
8	23	45	76	90	90	174	253	198	126	79	31	25
9	18	42	75	77	84	210	225	274	136	77	32	24
10	31	38	72	132	77	180	225	361	283	72	33	16
11	95	36	87	196	73	153	243	276	281	63	30	8.9
12	64	35	137	173	67	137	243	223	182	58	28	20
13	41	36	118	155	74	129	295	194	141	58	28	19
14	36	33	102	201	184	129	453	173	121	67	30	22
15	32	31	90	210	268	117	467	257	109	65	41	23
16	29	27	118	140	247	132	386	453	100	57	35	23
17	25	30	196	99	187	196	647	481	97	52	32	28
18	21	31	164	90	141	481	730	358	90	47	31	24
19	23	31	114	99	106	616	547	283	88	54	36	24
20	22	28	96	103	100	412	539	257	88	132	32	30
21	20	27	92	97	115	290	629	361	87	108	29	30
22	19	36	87	90	109	285	457	323	88	77	27	28
23	20	46	72	90	96	740	457	234	196	69	26	25
24	24	38	81	97	90	697	507	196	386	76	25	24
25	30	40	176	112	93	467	386	167	315	65	25	22
26	38	36	164	136	88	344	307	148	219	55	25	21
27	36	40	134	120	88	281	259	136	176	52	23	21
28	30	42	121	93	87	239	230	126	141	47	48	20
29	27	45	139	84	90	239	212	117	115	44	48	19
30	25	100	121	81	-----	281	196	106	106	40	33	20
31	24	-----	92	78	-----	255	-----	103	-----	37	27	-----
TOTAL	857	1,186	3,246	3,603	3,242	8,637	11,085	7,537	5,156	2,427	981	742.9
MEAN	27.6	39.5	105	116	112	279	370	243	173	78.3	31.6	24.8
MAX	95	100	196	210	268	740	730	481	386	185	48	36
MIN	12	23	49	77	66	102	196	103	87	37	23	8.9
CFSM	.44	.63	1.67	1.85	1.78	4.44	5.89	3.87	2.75	1.25	.50	.39
IN.	.51	.70	1.92	2.13	1.92	5.12	6.57	4.46	3.08	1.44	.58	.44

CAL YR 1971 TOTAL 33,174.7 MEAN 90.9 MAX 688 MIN 4.1 CFSM 1.45 IN 19.65
 WTR YR 1972 TOTAL 48,739.9 MEAN 133 MAX 740 MIN 8.9 CFSM 2.12 IN 28.87

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	1800	5.25	900				
4-17	2100	5.09	810				

MERRIMACK RIVER BASIN

57

01096500 Nashua River at East Pepperell, Mass.

LOCATION.--Lat 42°40'03", long 71°34'32", Middlesex County, on right bank 200 ft downstream from powerplant of Pepperell Paper Co. at East Pepperell and 0.8 mile upstream from Nissitissit River.

DRAINAGE AREA.--Total above gage, 433 sq mi; net above gage, 316 sq mi (flow diverted from 117 sq mi for use of Boston metropolitan district and city of Worcester).

PERIOD OF RECORD.--October 1935 to current year.

GAUGE.--Water-stage recorder. Datum of gage is 169.04 ft above mean sea level.

AVERAGE DISCHARGE.--37 years, 519 cfs (22.30 inches per year), adjusted for wastage to Nashua River.

EXTREMES.--Current year: Maximum discharge, 3,840 cfs Mar. 24 (gage height, 7.20 ft); minimum daily, 7.2 cfs Nov. 14.
Period of record: Maximum discharge, 20,900 cfs Mar. 20, 1936 (gage height, 19.1 ft, from floodmarks), from rating curve extended above 12,000 cfs on basis of velocity-area studies; minimum daily, 1.1 cfs Aug. 13, 1939.

REMARKS.--Records good. Extremes and daily discharge include water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district, water diverted into basin from Ware River basin for municipal use of Fitchburg, and water diverted around station through plant of Pepperell Paper Co. Flow regulated by powerplant above station.

REVISIONS.--WSP 801: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	177	598	309	368	515	1,280	883	1,190	709	254	221
2	111	310	615	389	364	432	1,140	821	1,860	833	259	158
3	11	255	515	687	349	1,020	1,620	861	1,510	695	259	61
4	140	171	270	611	362	1,800	1,580	1,380	1,080	736	259	292
5	140	353	9.5	571	637	1,710	1,580	1,830	1,030	550	255	347
6	140	195	404	567	371	1,280	1,460	1,550	940	532	251	668
7	214	16	425	564	496	1,030	1,400	1,100	839	477	246	399
8	212	184	186	558	387	1,020	1,280	1,030	774	480	228	15
9	119	398	312	156	348	1,220	883	1,150	744	640	146	16
10	10	341	544	477	409	1,120	1,160	1,510	1,260	538	120	16
11	157	174	397	753	287	929	1,070	1,460	1,700	436	236	134
12	418	179	195	810	335	596	994	1,220	1,320	654	277	184
13	342	169	710	764	188	878	1,140	1,030	1,070	514	261	182
14	149	7.2	595	776	816	769	1,580	813	877	415	165	180
15	187	178	578	893	1,150	759	1,700	1,020	602	424	246	182
16	197	169	584	523	1,050	814	1,410	1,650	733	411	250	182
17	7.5	176	666	621	860	1,100	1,930	1,890	614	392	258	182
18	184	170	701	544	685	2,230	2,470	1,810	454	300	266	203
19	186	153	345	376	494	3,040	2,470	1,490	620	213	188	223
20	181	132	645	480	264	2,880	2,260	1,310	744	426	67	220
21	187	8.9	634	477	613	2,100	2,480	1,550	676	548	259	220
22	183	379	567	463	578	1,870	2,390	1,630	631	451	299	218
23	137	255	415	247	398	2,920	2,050	1,270	672	421	256	216
24	9.1	178	146	625	472	3,740	2,280	1,020	984	419	235	214
25	320	11	313	609	576	3,360	2,070	883	1,290	415	110	213
26	183	304	566	552	431	2,490	1,650	770	1,130	401	35	179
27	140	12	748	550	142	1,890	1,330	647	996	360	52	155
28	183	88	639	424	473	1,530	1,150	607	884	337	257	153
29	313	400	614	308	553	1,350	1,030	549	505	329	311	136
30	206	596	640	24	-----	1,410	849	500	401	320	250	81
31	11	-----	174	454	-----	1,400	-----	478	-----	277	246	-----
TOTAL	5,200.6	6,129.1	14,740.5	16,158	14,470	49,202	47,686	35,712	28,230	14,653	6,881	5,850
MEAN	168	204	476	521	499	1,587	1,590	1,152	941	473	221	195
MAX	418	586	748	893	1,150	3,740	2,480	1,890	1,860	833	311	668
MIN	7.5	7.2	9.5	24	142	432	849	478	401	213	35	15
MEAN†	155	197	464	510	490	1,579	1,581	1,141	930	463	212	179
CFSM†	.49	.62	1.47	1.61	1.55	5.00	5.00	3.61	2.94	1.47	.67	.57
IN.†	.57	.70	1.69	1.86	1.67	5.76	5.58	4.16	3.28	1.69	.77	.63
CAL YR 1970	TOTAL 83,640	MEAN 229	MAX 1,340	MIN 24	MEAN† 440	CFSM† 1.39	INT 18.89					
WTR YR 1971	TOTAL 63,167	MEAN 173	MAX 1,480	MIN 37	MEAN† 659	CFSM† 2.09	INT 28.38					

† Adjusted for water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district and for water diverted into basin from Ware River basin for municipal supply of Fitchburg (figures represent discharge from net drainage area). Records of wastage furnished by Water Division of Metropolitan District Commission and records of diversion furnished by city of Fitchburg.

MERRIMACK RIVER BASIN

01096910 Boulder Brook at East Bolton, Mass.

LOCATION.--Lat 42°27'04", long 71°34'39", Worcester County, on right bank 900 ft downstream from Interstate Highway 495, 0.9 mile west of East Bolton, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--1.61 sq mi.

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 290 ft (from topographic map).

EXTREMES.--June to September 1971: Maximum discharge during period, 6.4 cfs Aug. 4 (gage height, 2.11 ft); minimum, 0.02 cfs Aug. 25-27. Water year 1972: Maximum discharge, 71 cfs Mar. 22 (gage height, 2.76 ft); minimum, 0.05 cfs Oct. 1-6.

REMARKS.--Records fair. Records of chemical analyses and water temperatures for the period June 1971 to September 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1971

DAY	JUN	JUL	AUG	SEP
1	2.4	.28	.10	.08
2	2.3	.48	.08	.07
3	2.2	.28	.07	.06
4	2.4	.18	1.9	.06
5	2.3	.14	.34	.06
6	1.9	.10	.16	.05
7	1.7	.10	.12	.05
8	1.6	.09	.10	.05
9	1.8	.09	.08	.07
10	1.7	.08	.06	.07
11	1.5	.08	.10	.05
12	1.2	.14	.14	.70
13	1.1	.09	.08	.25
14	1.1	.07	.07	.48
15	.93	.05	.06	.25
16	.87	.04	.06	.16
17	.81	.07	.05	.14
18	.70	.12	.04	.14
19	.60	.10	.03	.14
20	.52	.10	.20	.10
21	.52	.08	.07	.14
22	.65	.07	.06	.12
23	.56	.06	.05	.09
24	.52	.05	.04	.09
25	.44	.04	.03	.38
26	.70	.04	.02	.07
27	.48	.06	.22	.07
28	.37	.05	.40	.07
29	.31	.03	.16	.07
30	.29	.18	.10	.07
31	-----	.14	.09	-----
TOTAL	34.46	3.48	5.08	5.90
MEAN	1.15	.11	.16	.13
MAX	2.4	.48	1.9	.70
MIN	.28	.03	.02	.05
CFSM	.71	.07	.10	.08
IN.	.80	.08	.12	.09

PEAK DISCHARGE (BASE, 28 CFS).--No peak above base.

MERRIMACK RIVER BASIN

59

01096910 Boulder Brook at East Bolton, Mass.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.20	2.3	1.4	1.4	5.5	8.5	4.2	20	4.0	.75	.14
2	.05	.44	1.4	1.8	1.4	6.0	7.8	4.5	7.1	2.6	.64	.12
3	.05	.44	1.1	2.7	1.5	22	7.4	8.8	4.7	2.6	.52	.87
4	.05	.40	.99	2.0	11	13	7.4	18	4.0	3.4	.45	.65
5	.05	.31	.81	2.3	4.7	9.5	7.4	9.5	4.5	2.3	.38	.34
6	.09	.25	.70	1.8	2.4	8.1	6.4	7.4	3.6	2.1	.31	.22
7	.09	.40	1.3	1.5	2.4	7.1	6.0	6.7	3.4	1.9	.29	.18
8	.06	.37	1.5	1.5	2.1	11	6.0	7.1	3.4	1.5	.30	.16
9	.06	.31	1.3	1.5	2.1	10	6.0	11	4.7	2.0	.34	.70
10	1.2	.31	1.4	4.0	1.8	7.4	5.5	10	1.4	1.5	.34	.60
11	.60	.31	2.3	3.2	1.5	6.0	5.2	7.4	6.0	1.3	.25	.31
12	.22	.31	2.1	3.2	1.5	6.0	4.7	7.1	4.2	1.1	.22	.25
13	.14	.31	1.9	3.6	7.8	6.7	6.0	6.0	3.4	1.1	.22	.22
14	.12	.25	1.5	4.7	8.8	6.7	7.8	5.5	3.0	1.4	.20	.60
15	.12	.22	1.6	3.0	5.5	7.1	5.5	12	2.9	1.1	.29	.49
16	.12	.22	2.6	2.1	4.5	6.4	5.5	9.2	2.7	.93	.25	.34
17	.10	.25	2.3	1.6	3.2	15	9.2	8.1	3.0	.81	.20	.25
18	.09	.25	1.9	1.8	3.2	22	6.4	6.7	2.7	.81	.25	.22
19	.10	.25	1.4	2.3	4.0	14	5.5	6.0	3.0	.81	.40	.81
20	.14	.25	1.3	2.1	10	12	8.1	8.5	2.7	1.1	.25	.81
21	.14	.22	1.3	2.0	3.8	13	8.5	11	2.3	.93	.18	.48
22	.14	.48	1.2	2.0	3.0	28	6.4	6.7	3.0	.81	.18	.44
23	.70	.44	1.1	3.1	2.7	30	11	5.0	7.4	1.0	.16	.34
24	.18	.34	1.9	2.6	2.7	20	9.5	4.5	6.0	1.3	.14	.28
25	.40	.34	2.1	3.0	2.7	15	7.4	4.0	4.0	1.7	.14	.28
26	.31	.44	1.5	2.6	2.7	13	6.4	3.6	4.5	1.3	.12	.25
27	.22	.40	1.5	1.5	2.6	11	5.7	3.6	3.6	1.0	.44	.25
28	.20	.56	1.5	1.5	2.7	9.5	5.5	3.0	2.7	.85	.44	.22
29	.20	1.3	1.5	1.5	2.9	9.2	5.2	2.7	2.3	.75	.22	.20
30	.18	5.2	1.5	1.5	-----	9.2	4.5	2.6	3.2	.64	.16	.20
31	.13	-----	1.6	1.5	-----	9.2	-----	5.7	-----	.68	.14	-----
TOTAL	5.84	15.77	48.40	69.9	106.6	368.6	202.4	216.1	142.0	45.32	9.15	11.01
MEAN	.19	.53	1.56	2.25	3.68	11.9	6.75	6.57	4.73	1.46	.30	.37
MAX	1.2	5.2	2.6	4.7	11	30	11	18	20	4.0	.75	.87
MIN	.05	.20	.70	1.4	1.4	5.5	4.5	2.6	2.3	.64	.12	.12
CFSM	.12	.33	.97	1.40	2.29	7.39	4.13	4.33	2.94	.91	.19	.23
IN ₆	.13	.36	1.12	1.62	2.46	8.52	4.68	4.99	3.28	1.05	.21	.25

WTR YR 1972 TOTAL 1,241.09 MEAN 3.39 MAX 30 MIN .05 CFSM 2.11 IN 28.68

PEAK DISCHARGE (BASE, 28 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1115	2.48	29				
3-17	2215	2.48	29				
3-22	2015	2.76	71				
5-3	2245	2.47	28				
5-31	2315	2.50	31				

MERRIMACK RIVER BASIN

01097000 Assabet River at Maynard, Mass.

LOCATION.--Lat 42°25'55", long 71°27'01", Middlesex County, on right bank at Maynard, 150 ft upstream from bridge on State Highway 27, 1.7 miles downstream from Assabet Brook, and 7.1 miles upstream from confluence with Sudbury River.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 142.12 ft above mean sea level.

AVERAGE DISCHARGE.--31 years, 178 cfs (20.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,590 cfs Mar. 23 (gage height, 5.89 ft); minimum daily, 15 cfs Sept. 2.

Period of record: Maximum discharge, 4,250 cfs Aug. 20, 1955 (gage height, 8.94 ft); maximum gage height, 8.96 ft Aug. 20, 1955 (back-water from debris); minimum daily discharge, 0.20 cfs Feb. 7, 1965.

Maximum discharge since at least 1886, that of Aug. 20, 1955.

REMARKS.--Records fair. Occasional diurnal fluctuation at low flow by mills above station; greater regulation prior to 1969. High flow slightly affected by retarding reservoirs since 1962. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1231: 1945-46.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	45	244	116	110	209	507	254	410	223	45	16
2	23	40	234	120	104	276	477	250	661	230	40	15
3	22	53	195	142	106	570	461	275	591	233	68	60
4	24	58	156	160	232	1,030	434	529	442	255	55	130
5	21	49	118	172	300	1,040	418	741	413	258	45	90
6	23	42	98	165	289	760	397	654	410	239	39	66
7	29	49	108	153	244	610	383	517	370	212	36	55
8	28	56	129	140	200	619	364	435	342	188	45	50
9	24	53	140	124	174	682	344	475	347	179	47	70
10	48	48	142	162	153	646	322	597	532	166	43	75
11	104	46	153	209	142	525	310	591	683	150	33	60
12	106	46	167	242	129	452	299	499	603	130	28	50
13	98	44	179	252	146	441	306	429	456	111	26	45
14	64	40	162	268	320	463	373	379	369	119	25	55
15	48	40	158	252	424	390	409	406	321	117	32	62
16	41	41	167	224	387	466	369	514	286	107	28	54
17	39	41	174	170	317	557	396	529	268	95	25	47
18	37	40	179	140	252	1,130	422	456	255	75	23	45
19	33	41	158	140	202	1,430	383	390	257	86	22	70
20	32	42	137	146	165	1,180	362	364	251	117	26	100
21	30	42	124	149	190	916	444	419	247	100	23	80
22	29	54	120	146	197	877	456	459	245	89	21	66
23	27	64	106	144	175	1,360	479	412	302	92	19	58
24	28	63	112	158	172	1,500	567	347	390	120	18	52
25	41	72	140	188	174	1,200	534	303	403	130	17	48
26	49	71	149	185	176	971	450	260	361	102	16	44
27	47	65	142	174	175	806	383	244	321	100	16	41
28	44	74	144	156	174	700	333	221	279	90	25	39
29	39	98	140	129	183	633	296	203	234	85	23	38
30	35	202	133	124	-----	597	274	186	216	78	20	39
31	48	-----	124	118	-----	554	-----	183	-----	85	18	-----
TOTAL	1,258	1,719	4,632	5,178	6,012	23,530	11,952	12,571	11,264	4,369	1,036	1,720
MEAN	40.9	57.3	149	167	207	759	398	406	375	141	33.4	57.3
MAX	106	202	244	268	424	1,500	567	781	683	258	95	130
MIN	19	40	98	116	104	209	274	183	216	75	16	15
CFSM	.35	.49	1.28	1.44	1.78	6.54	3.43	3.50	3.23	1.22	.29	.49
IN.	.41	.55	1.49	1.66	1.93	7.55	3.83	4.03	3.61	1.40	.33	.55

CAL YR 1971 TOTAL 57,143.9 MEAN 157 MAX 833 MIN 6.9 CFSM 1.75 IN 18.33
 WTR YR 1972 TOTAL 85,251.0 MEAN 233 MAX 1,500 MIN 15 CFSM 2.01 IN 27.34

NOTE.--No gage-height record July 28 to Sept. 30.

MERRIMACK RIVER BASIN

61

01097300 Nashoba Brook near Acton, Mass.

LOCATION.--Lat 42°30'39", long 71°24'25", Middlesex County, on right bank 1,500 ft downstream from dam at North Acton, 2.2 miles northeast of Acton, and 5 miles above mouth.

DRAINAGE AREA.--12.7 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-63. July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 16.2 cfs (17.32 inches per year).

EXTREMES.--Current year: Maximum discharge, about 170 cfs Mar. 18 (gage height, 4.59 ft, affected by backwater from ice); minimum, 0.18 cfs Nov. 14.

Period of record: Maximum discharge, 360 cfs Mar. 19, 1968 (gage height, 5.07 ft); minimum, 0.02 cfs Sept. 6, 1968.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation since 1967 by small pond above station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1	0.37	1.3	31	12	0.8	1.8	50	31	0.0	20	0.4	1.5
2	0.27	1.7	35	13	0.2	21	50	30	93	28	0.4	1.3
3	0.40	3.1	23	15	0.0	56	54	32	0.0	22	0.3	3.0
4	0.31	4.4	14	19	14	120	52	74	40	10	0.9	5.4
5	0.30	7.0	11	20	34	115	50	04	30	18	4.9	4.4
6	0.31	4.9	0.4	21	35	40	49	49	41	16	3.6	5.1
7	0.37	0.4	7.3	17	28	70	48	53	12	15	3.7	5.2
8	0.37	3.7	0.3	18	22	70	47	44	20	13	3.9	3.9
9	0.43	0.93	0.2	13	16	46	45	57	10	12	4.2	3.1
10	1.7	2.4	0.7	15	11	72	44	72	76	17	4.7	3.0
11	7.5	3.0	17	24	11	57	43	02	101	11	5.8	2.6
12	0.8	16	18	27	30	48	41	91	0.6	0.6	4.8	2.1
13	5.9	2.7	22	27	11	43	41	36	44	0.6	4.1	2.0
14	3.7	0.21	20	20	15	43	02	37	36	0.6	3.7	2.4
15	2.9	0.47	18	29	42	44	64	49	10	9.2	4.2	3.6
16	2.3	0.43	18	26	37	37	50	74	24	7.9	5.1	3.4
17	1.8	0.65	17	14	23	52	61	64	25	0.8	4.6	2.0
18	1.7	1.3	20	17	17	140	67	57	21	0.3	3.9	2.0
19	1.5	1.7	17	11	18	145	55	46	20	7.3	1.0	3.0
20	1.4	3.9	13	12	17	190	50	46	27	42	1.9	5.8
21	1.4	3.4	13	13	14	73	64	60	26	52	2.5	5.0
22	1.3	3.1	10	13	14	76	62	41	24	30	2.3	4.0
23	1.3	3.0	0.0	11	14	150	63	47	34	19	2.0	3.2
24	1.2	4.4	11	15	14	125	76	36	50	15	14	2.7
25	1.5	4.9	15	10	7.6	00	67	30	45	20	4.9	2.5
26	2.4	3.7	18	20	15	72	55	26	34	12	2.1	2.4
27	3.3	3.5	18	17	16	04	46	73	29	0.6	1.8	2.3
28	3.0	4.3	17	17	16	50	41	16	24	1.1	2.1	2.2
29	1.9	5.8	17	10	18	57	35	76	15	3.4	2.4	2.1
30	0.61	19	17	0.8	-----	55	33	15	15	0.8	2.0	2.1
31	1.2	-----	17	0.4	-----	53	-----	15	-----	0.3	1.7	-----
TOTAL	61.54	125.19	490.9	526.2	545.0	3,792	1,573	1,412	1,194	466.5	129.0	94.9
MEAN	1.99	4.17	15.8	17.0	18.8	73.9	52.4	45.5	40.0	15.0	4.16	3.16
MAX	0.8	19	35	29	42	150	76	04	101	52	14	5.8
MIN	0.30	0.21	7.3	0.4	0.0	18	33	15	15	1.1	1.7	1.3
CFSM	0.16	0.33	1.24	1.34	1.49	5.32	4.13	3.58	3.15	1.19	0.33	0.25
IN	0.18	0.37	1.44	1.54	1.60	0.71	4.61	4.14	3.91	1.37	0.38	0.28

CAL YR 1971 TOTAL 5,917.40 MEAN 15.0 MAX 50 MIN 0.01 CFSM 1.25 IN 17.04
 WTR YR 1972 TOTAL 8,915.23 MEAN 24.4 MAX 150 MIN 0.21 CFSM 1.92 IN 26.11

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	2100	4.46	1150	5-4	2045	3.67	93
3-9	0645	3.98	191	6-2	2045	3.75	101
3-18	2315	4.59	1170	6-10	2230	3.86	113
3-23	1045	4.52	1160				

† About.

MERRIMACK RIVER BASIN

01097500 Sudbury River at Framingham Center, Mass.

LOCATION.--Lat 42°17'29", long 71°26'35", Middlesex County, at dam of Framingham Reservoir No. 1, 0.5 mile upstream from outlet of Farm Pond and 0.8 mile southwest of Framingham Center.

DRAINAGE AREA.--75.2 sq mi since January 1881.

PERIOD OF RECORD.--January 1875 to current year.

AVERAGE DISCHARGE.--97 years, 113 cfs (20.41 inches per year), adjusted to present drainage area.

REMARKS.--Records adjusted for change in reservoir contents, diversions, and wastage. Flow diverted as needed for use of Boston metropolitan district. Part of flow from Wachusett Reservoir on South Branch Nashua River is diverted into Sudbury Reservoir en route to Boston metropolitan district.

COOPERATION.--Records furnished by Water Division of Metropolitan District Commission.

REVISIONS (WATER YEARS).--WSP 1051: 1937.

MONTHLY DISCHARGE AND RAINFALL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	382.5	0.164	0.25	0.29	3.52
November	1,113.0	.493	.76	.85	5.94
December	2,206.4	.946	1.46	1.69	2.82
Calendar year 1971	24,169.4	.881	1.36	18.49	39.26
January	1,993.5	.855	1.32	1.53	7.99
February	3,205.0	1.470	2.27	2.45	5.08
March	12,056.0	5.172	8.00	9.23	7.98
April	5,096.1	2.259	3.50	3.90	3.70
May	6,910.3	2.964	4.59	5.29	7.97
June	6,243.7	2.768	4.28	4.78	6.63
July	1,651.3	.708	1.10	1.26	3.04
August	182.7	.078	.12	.14	1.67
September	651.2	.289	.45	.50	4.46
Water year 1972	41,691.7	1.515	2.34	31.90	54.80

MERRIMACK RIVER BASIN

63

01099500 Concord River below River Meadow Brook, at Lowell, Mass.

LOCATION.--Lat 42°38'12", long 71°18'09", Middlesex County, on right bank 300 ft downstream from Rogers Street Bridge at Lowell, 0.3 mile downstream from River Meadow Brook, and 0.8 mile upstream from mouth.

DRAINAGE AREA.--Total above gage, 405 sq mi; net above gage, 312 sq mi (diversion as needed from 92.6 sq mi for use of Boston metropolitan district).

PERIOD OF RECORD.--October 1936 to current year. October, November 1936 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 67.41 ft above mean sea level, datum of 1929.

AVERAGE DISCHARGE.--36 years, 451 cfs (19.63 inches per year), adjusted to net drainage area.

EXTREMES.--Current year: Maximum discharge, 3,460 cfs Mar. 25 (gage height, 8.14 ft); minimum daily, .5 cfs Oct. 4.

Period of record: Maximum discharge, 4,800 cfs Mar. 22, 1968 (gage height, 9.16 ft); minimum daily, 4.0 cfs Sept. 29, 1957.

REMARKS.--Records good. Daily discharge includes water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate. Prior to December 1961, water diverted above station for use of city of Lowell. Low flow regulated by mills above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	118	603	458	403	688	2,280	1,170	1,030	1,040	413	107
2	77	130	633	453	383	789	2,160	1,100	1,130	994	387	96
3	66	151	639	490	353	1,170	2,040	1,080	1,230	955	352	132
4	65	174	597	506	567	1,480	1,940	1,250	1,290	939	316	261
5	68	180	544	533	645	1,680	1,850	1,390	1,340	920	282	302
6	68	168	506	500	670	1,750	1,750	1,500	1,340	902	254	302
7	77	168	495	522	680	1,850	1,650	1,540	1,330	869	228	282
8	75	170	479	511	640	1,980	1,540	1,520	1,310	831	224	254
9	75	176	479	484	615	2,050	1,460	1,540	1,310	800	235	221
10	108	170	490	533	579	2,050	1,400	1,580	1,550	762	246	208
11	186	163	517	567	539	2,050	1,340	1,630	1,610	717	243	211
12	240	170	544	609	500	1,950	1,280	1,630	1,650	668	243	208
13	262	170	550	657	517	1,880	1,240	1,600	1,650	632	231	201
14	255	173	550	708	734	1,820	1,250	1,540	1,600	609	228	198
15	225	173	550	727	810	1,690	1,240	1,580	1,510	570	239	198
16	195	167	573	670	894	1,640	1,230	1,590	1,420	527	228	194
17	162	167	585	610	922	1,830	1,270	1,590	1,330	482	214	191
18	143	167	567	579	894	2,260	1,260	1,580	1,240	438	204	176
19	125	176	550	567	675	2,570	1,250	1,520	1,200	418	194	179
20	111	173	528	544	470	2,850	1,250	1,470	1,150	339	185	198
21	102	170	506	533	650	2,920	1,280	1,510	1,110	604	176	228
22	97	189	474	511	710	2,950	1,290	1,490	1,090	665	170	250
23	91	207	438	506	710	3,290	1,360	1,460	1,150	639	153	246
24	81	221	464	511	688	3,390	1,440	1,390	1,170	613	137	231
25	100	239	484	533	663	3,440	1,470	1,310	1,200	609	124	211
26	120	270	484	533	639	3,360	1,470	1,230	1,220	582	114	198
27	135	278	490	484	633	3,180	1,430	1,160	1,210	551	109	179
28	140	299	495	479	621	2,950	1,380	1,090	1,160	519	124	158
29	130	368	495	464	633	2,750	1,300	1,010	1,100	489	117	153
30	123	533	484	443	-----	2,580	1,240	943	1,050	458	112	153
31	108	-----	469	418	-----	2,430	-----	889	-----	429	109	-----
TOTAL	3,889	6,078	16,262	16,643	18,437	69,307	44,340	42,872	38,680	20,770	6,591	6,126
MEAN	125	203	525	537	636	2,236	1,478	1,383	1,289	670	213	204
MAX	262	533	639	727	922	3,440	2,280	1,630	1,650	1,040	413	302
MIN	65	118	438	418	353	688	1,230	889	1,030	418	109	96
MEAN†	89.3	116	378	416	448	1,579	1,176	1,049	966	571	190	175
CFSM†	-29	-37	1.21	1.33	1.44	5.06	3.77	3.36	3.10	1.83	-61	.56
IN.†	.33	.42	1.40	1.54	1.55	5.84	4.21	3.88	3.46	2.11	.70	.63

CAL YR 1971 TOTAL 184,038 MEAN 504 MAX 1,960 MIN 55 MEAN† 373 CFSM† 1.20 IN† 16.22
 WTR YR 1972 TOTAL 289,995 MEAN 792 MAX 3,440 MIN 65 MEAN† 597 CFSM† 1.91 IN† 26.05

† Adjusted for water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate (figures represent net discharge from net drainage area). Records of wastage furnished by Water Division of Metropolitan District Commission.

MERRIMACK RIVER BASIN

01100000 Merrimack River below Concord River, at Lowell, Mass.

LOCATION.--Lat 42°38'45", long 71°17'56", Middlesex County, on right bank at Lowell, 1,100 ft downstream from Concord River.

DRAINAGE AREA.--Total above gage, 4,635 sq mi; net above gage, 4,425 sq mi (diversions as needed from 210 sq mi for use of Boston metropolitan district and city of Worcester).

PERIOD OF RECORD.--June 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.18 ft above mean sea level. Prior to Mar. 7, 1934, at Boott Mills 1,800 ft upstream and 700 ft above mouth of Concord River, in same gage pool and at same datum; gage-height record (furnished by Proprietors of the Locks and Canals on Merrimack River) was indicative of flow including that of Concord River.

AVERAGE DISCHARGE.--49 years, 7,077 cfs (21.72 inches per year), adjusted for wastage to Merrimack River.

EXTREMES.--Current year: Maximum discharge, 36,600 cfs Apr. 21 (gage height, 50.06 ft); minimum daily, 554 cfs Oct. 10.
Period of record: Maximum discharge, 173,000 cfs Mar. 20, 1936 (gage height, 68.4 ft, from floodmarks); minimum daily, 199 cfs Sept. 23, 1923.
Maximum discharge since 1735, that of Mar. 20, 1936.

REMARKS.--Records excellent. Daily discharge includes water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs above station. See page 67 for description and month-and-use contents of many of these reservoirs. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,610	2,620	4,510	4,050	4,470	5,940	17,000	20,500	9,800	8,390	5,740	3,100
2	1,170	2,220	4,270	4,890	4,510	6,570	17,000	21,400	16,900	8,570	4,540	2,030
3	1,130	2,270	4,270	4,950	4,010	8,330	18,700	23,200	18,600	7,690	3,670	2,420
4	1,590	2,240	3,520	5,260	4,950	10,600	19,700	25,800	17,000	6,440	3,600	2,920
5	1,490	2,370	3,200	5,290	5,550	11,900	15,400	30,000	14,700	8,100	3,220	3,160
6	1,560	1,810	3,550	4,790	5,700	11,200	19,700	31,200	13,400	8,950	3,460	3,430
7	1,430	2,520	3,210	4,570	6,090	10,400	18,100	28,900	11,700	7,940	4,640	2,970
8	1,270	3,110	3,500	4,310	5,560	10,100	17,100	25,500	10,700	5,220	3,650	2,700
9	1,010	2,420	3,350	4,030	5,240	10,000	15,900	25,300	10,300	6,090	2,650	1,730
10	554	2,670	3,930	4,200	4,830	9,800	14,300	25,200	11,500	6,110	2,660	1,710
11	1,960	2,490	4,520	4,820	4,530	9,040	14,000	22,300	12,100	5,940	2,700	2,120
12	3,170	2,300	4,790	5,200	3,820	8,560	14,500	19,400	11,400	5,760	3,160	1,980
13	4,820	1,770	5,610	5,730	4,310	8,410	15,100	17,700	10,500	6,890	2,440	2,140
14	3,850	2,040	6,060	6,210	6,560	9,290	18,200	16,000	9,470	6,640	2,800	2,190
15	3,380	2,540	5,840	6,380	8,010	7,900	19,900	16,100	7,950	6,160	3,140	1,930
16	2,620	2,400	5,550	6,320	8,920	7,610	19,600	20,600	7,520	5,200	2,850	1,150
17	2,580	2,290	6,090	5,770	9,870	9,250	21,200	25,000	6,680	5,650	2,540	911
18	2,970	2,260	6,070	5,740	8,950	14,100	26,100	23,500	6,570	5,030	2,410	2,150
19	2,480	2,160	5,440	5,240	7,960	20,700	30,200	20,800	6,130	4,510	1,740	2,530
20	2,330	1,500	5,210	5,540	6,100	24,900	32,200	19,000	6,180	4,840	1,740	2,540
21	2,230	1,510	5,170	5,430	6,400	23,800	35,700	18,900	6,090	6,520	2,360	2,120
22	2,080	2,320	4,950	5,060	7,220	21,600	35,500	19,000	6,080	6,470	2,360	2,030
23	950	2,190	4,270	5,010	6,800	25,000	32,700	17,000	6,670	6,790	2,400	1,350
24	1,070	2,370	4,540	4,980	6,100	31,900	31,900	15,000	7,930	7,590	2,290	1,030
25	2,120	1,590	4,620	5,310	5,750	31,700	30,800	13,300	8,990	8,540	1,780	2,760
26	2,290	2,530	5,350	5,370	5,880	27,600	29,800	11,900	11,100	10,100	1,170	2,560
27	2,260	1,640	5,860	5,270	5,430	23,900	28,300	10,400	11,200	5,270	1,620	2,520
28	2,680	1,740	5,650	5,540	5,420	21,300	25,300	9,240	10,500	8,050	2,670	2,360
29	2,720	3,050	5,860	5,060	5,500	19,000	22,100	8,040	9,520	6,770	2,620	2,090
30	2,530	3,590	5,450	4,840	-----	18,200	20,300	7,550	8,830	6,660	5,350	1,170
31	2,220	-----	4,750	4,730	-----	17,700	-----	6,780	-----	6,010	4,430	-----
TOTAL	66,484	68,620	149,120	160,290	174,440	475,140	679,300	594,510	306,010	212,890	91,300	65,711
MEAN	2,145	2,287	4,810	5,171	5,615	15,330	22,640	19,180	10,200	6,867	2,945	2,190
MAX	4,820	3,500	6,090	6,380	9,870	31,900	35,700	31,200	18,600	10,100	5,740	3,430
MIN	554	1,500	3,200	4,030	3,820	5,960	14,000	6,780	6,080	4,510	1,020	911
MEAN†	2,101	2,193	4,656	5,041	5,818	14,660	22,330	18,830	9,868	6,759	2,914	2,153
CFSMT	.47	.50	1.05	1.14	1.31	3.31	5.05	4.26	2.23	1.53	.66	.49
IN.†	.55	.55	1.21	1.31	1.42	3.82	5.63	4.91	2.49	1.76	.76	.54

CAL YR 1971 TOTAL 2,309,512 MEAN 6,327 MAX 31,200 MIN 337 MEAN† 6,188 CFSMT 1.40 INT† 18.99
 WTR YR 1972 TOTAL 3,043,815 MEAN 8,316 MAX 35,700 MIN 554 MEAN† 8,112 CFSMT 1.83 INT† 24.96

† Adjusted for water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate (figures represent net discharge from net drainage area). Records of wastage furnished by Water Division of Metropolitan District Commission.

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

65

01100600 Shawheen River near Wilmington, Mass.

LOCATION.--Lat 42°34'05", long 71°12'55", Middlesex County, on right bank at downstream side of bridge on State Highway 129, 1 mile upstream from Content Brook, and 2.5 miles northwest of Wilmington.

DRAINAGE AREA.--36.6 sq mi.

PERIOD OF RECORD.--November 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 80.44 ft above mean sea level.

AVERAGE DISCHARGE.--8 years (1964-72), 50.9 cfs (18.89 inches per year).

EXTREMES.--Current year: Maximum discharge, about 760 cfs Mar. 4 (gage height, about 7.7 ft); minimum, 4.6 cfs Oct. 6.
Period of record: Maximum discharge, 1,050 cfs Mar. 19, 1968 (gage height, 8.60 ft); minimum, 1.2 cfs Aug. 30, 31, Sept. 1, 2-4, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are fair.

REVISIONS.--WRD Mass., N.H., R.I., Vt. 1969: Drainage area. WRD Mass., N.H., R.I., Vt. 1971: 1970 (monthly and yearly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	13	90	30	26	50	107	66	167	57	33	7.8
2	5.7	14	82	30	24	76	103	63	308	61	31	7.7
3	5.2	26	75	39	23	275	100	62	200	61	30	15
4	5.0	26	52	50	40	700	97	132	125	58	28	52
5	4.7	22	43	57	101	636	97	210	144	58	24	97
6	5.0	18	36	55	105	255	97	144	221	58	20	81
7	6.7	16	42	58	100	189	93	109	170	54	18	52
8	7.1	21	44	51	74	182	90	94	165	47	18	33
9	6.4	21	43	39	55	298	85	102	164	41	19	22
10	9.8	18	41	46	40	238	80	158	253	34	22	18
11	32	17	43	64	31	166	75	147	356	30	22	14
12	39	17	41	72	28	133	73	116	243	27	20	14
13	30	16	37	74	32	120	74	100	157	25	17	13
14	16	16	35	78	123	121	92	89	118	30	15	14
15	12	15	33	74	149	92	112	93	100	34	18	18
16	13	15	40	68	103	107	99	156	88	34	18	21
17	11	15	45	55	80	154	99	152	82	30	16	17
18	11	14	38	36	64	493	117	121	80	25	15	13
19	10	14	35	31	38	472	105	101	81	22	14	11
20	8.9	16	31	33	28	299	94	92	81	25	12	14
21	9.1	19	30	34	37	210	119	120	81	26	11	15
22	8.8	23	30	34	37	199	125	139	77	36	10	14
23	8.3	27	25	34	36	454	127	112	86	103	9.4	13
24	8.4	24	26	36	34	377	179	93	129	87	8.6	11
25	11	50	41	46	34	241	136	82	121	92	8.1	10
26	25	62	44	52	33	180	110	73	97	85	8.1	9.8
27	22	58	41	44	32	151	96	65	83	89	7.8	9.6
28	19	50	39	38	33	133	86	58	74	71	9.2	8.9
29	17	70	39	30	39	122	80	52	66	61	11	8.6
30	15	86	35	29	-----	118	74	44	58	47	9.6	9.1
31	15	-----	28	28	-----	113	-----	45	-----	36	8.6	-----
TOTAL	402.5	819	1,306	1,445	1,579	7,114	3,021	3,192	4,175	1,544	511.4	645.5
MEAN	13.0	27.3	42.1	46.6	54.4	229	101	103	139	49.8	16.5	21.5
MAX	39	86	90	78	149	700	179	210	356	103	33	97
RIN	4.7	13	25	28	23	50	73	45	58	22	7.8	7.7
CFSM	.36	.75	1.15	1.27	1.49	6.26	2.76	2.81	3.80	1.36	.45	.59
IN.	.41	.83	1.33	1.47	1.60	7.23	3.07	3.24	4.24	1.57	.52	.66

CAL YR 1971 TOTAL 16,598.4 MEAN 45.5 MAX 316 MIN 4.3 CFSM 1.24 IN 16.87
WTR YR 1972 TOTAL 25,754.4 MEAN 70.4 MAX 700 MIN 4.7 CFSM 1.92 IN 26.18

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	-	7.7	760	3-23	1400	6.75	503
3-9	1245	5.81	319	6-2	0430	5.90	334
3-18	2400	6.93	548	6-11	0300	6.14	379

† About.

NOTE.--No gage-height record Nov. 11 to Dec. 19, Mar. 4.

MERRIMACK RIVER BASIN

01100700 East Meadow River near Haverhill, Mass.

LOCATION.--Lat 42°48'41", long 71°01'59", Essex County, on left bank 10 ft downstream from culvert on State Highway 110 and 3.5 miles northeast of Haverhill.

DRAINAGE AREA.--4.93 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 8.44 cfs (23.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 86 cfs Mar. 23 (gage height, 4.55 ft); minimum, 0.31 cfs Oct. 1.

Period of record: Maximum discharge, 211 cfs Mar. 19, 1968 (gage height, 5.45 ft); minimum, 0.05 cfs Sept. 5, 6, 1963.

REMARKS.--Records good except those for winter period and period of backwater from grass, which are fair. Recording rain gage at station since March 1963 (no winter records).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.31	1.1	32	6.0	3.0	6.0	28	11	37	18	6.6	6.74
2	0.41	1.4	14	6.5	3.0	10	34	10	36	16	5.8	5.53
3	0.45	3.0	4.5	9.5	3.0	24	36	11	25	13	5.0	3.9
4	0.51	3.3	6.5	11	22	40	32	31	24	18	4.1	25
5	0.56	2.3	4.5	10	22	38	33	34	54	16	3.4	15
6	0.51	1.0	3.5	11	15	31	30	24	38	12	2.6	7.0
7	0.74	1.4	4.7	9.5	10	27	28	15	30	10	2.3	3.3
8	0.74	2.3	5.7	7.5	8.0	28	25	14	26	6.5	2.4	2.3
9	0.74	1.8	5.4	6.5	7.0	34	22	20	24	7.8	2.5	1.7
10	3.05	1.7	7.3	9.0	5.4	30	21	30	58	7.6	3.3	1.8
11	4.1	1.0	12	12	5.0	24	20	25	46	6.0	3.0	1.7
12	0.02	1.0	15	13	4.5	21	20	20	32	5.3	1.9	1.4
13	2.0	1.0	13	12	4.0	19	22	17	25	6.6	1.5	1.1
14	1.7	1.7	4.4	18	30	17	34	14	20	11	1.02	2.3
15	1.05	1.05	5.6	16	23	18	35	24	17	8.8	1.4	5.3
16	1.02	1.02	14	4.5	16	16	27	37	15	6.0	1.0	5.2
17	1.1	1.02	19	6.0	11	27	27	30	15	5.2	0.84	3.4
18	1.1	1.02	15	4.5	8.5	58	27	21	15	4.7	0.93	2.6
19	1.1	1.02	4.0	4.7	10	67	22	16	13	4.1	1.0	2.6
20	1.1	1.02	7.0	5.4	10	51	24	15	12	4.1	0.93	4.8
21	0.45	1.0	6.4	5.4	9.0	39	33	24	11	6.0	1.4	5.8
22	0.45	5.7	4.7	5.3	8.5	45	28	27	12	21	1.5	4.4
23	0.45	7.0	5.0	5.3	8.0	81	29	14	21	22	1.02	3.4
24	0.46	4.1	6.5	6.0	8.0	72	33	13	32	20	1.0	2.5
25	1.6	4.4	15	7.5	7.8	54	27	11	27	23	0.84	1.8
26	2.5	7.5	14	9.0	7.8	45	27	4.3	21	20	0.74	1.6
27	2.5	8.3	11	6.0	7.8	36	16	6.0	18	13	0.64	1.5
28	1.7	6.0	4.0	4.3	7.3	30	14	7.4	15	13	2.5	1.2
29	1.5	4.0	4.0	4.1	7.0	29	13	6.4	12	14	2.6	0.74
30	1.2	30	7.5	4.1	-----	33	11	5.7	12	11	1.7	0.74
31	1.1	-----	6.2	3.4	-----	30	-----	5.5	-----	7.8	0.93	-----
TOTAL	51.42	119.7	316.2	250.4	297.7	1,082.0	780	554.3	746	359.4	66.75	115.35
MEAN	1.66	3.89	10.2	8.08	10.3	34.9	24.0	18.0	24.4	11.6	2.15	3.85
MAX	4.1	30	32	14	30	81	34	37	58	23	6.6	25
MIN	0.31	1.1	3.5	3.0	3.0	4.0	11	5.5	11	4.1	0.64	0.53
CFS	0.34	0.81	2.07	1.64	2.09	7.08	5.77	3.65	5.05	2.35	0.44	0.78
IN	0.39	0.90	2.39	1.89	2.25	8.16	6.69	4.22	5.64	2.72	0.50	0.87

CAL YR 1971 TOTAL 3,277.01 MEAN 8.94 MAX 54 MIN 0.14 CFSM 1.82 IN 24.73

WTR YR 1972 TOTAL 4,740.72 MEAN 13.0 MAX 81 MIN 0.31 CFSM 2.04 IN 35.42

PEAK DISCHARGE (BASE, 65 CFS)

NOTE.--Backwater from grass June 29 to Sept. 30.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	2015	4.36	72				
3-23	1900	4.55	86				
6-10	1315	4.25	65				

MERRIMACK RIVER BASIN

67

Reservoirs in Merrimack River basin

01077500. NEWFOUND LAKE on Newfound River, 1.7 miles north of Bristol, N.H., used for recreation and for storage of water for power, has usable capacity of 1,690,000,000 cu ft. Records furnished by Public Service Co. of New Hampshire.
01078500. FRANKLIN FALLS RESERVOIR on Pemigewasset River, 2 miles north of Franklin, N.H., completed in 1942, used for flood control, has usable capacity of 6,700,000,000 cu ft. Records furnished by Corps of Engineers.
01079000. MERRYMEETING LAKE on Merrymeeting River, 2.5 miles northeast of Alton, N.H., used for recreation and for storage of water for power, has usable capacity of 368,000,000 cu ft. Records furnished by New Hampshire Fish and Game Department.
01079500. LAKE WENTWORTH above Lake Winnepesaukee at Wolfboro Falls, N.H., used for recreation and for storage of water for power, has usable capacity of 854,000,000 cu ft. Records furnished by O. T. Berry Co.
01080000. LAKE WINNIPESAUKEE on Winnepesaukee River (see p. 35).
01082500. EDWARD MACDOWELL RESERVOIR on Nubbinusit Brook, at West Peterborough, N.H., 2 miles northwest of Peterborough, completed in 1950, used for flood control, has usable capacity of 538,000,000 cu ft. Records furnished by Corps of Engineers.
01085400. HOPKINTON LAKE on Contoocook River, at West Hopkinton, N.H., completed in 1962, used for flood control and recreation, has usable capacity of 3,084,000,000 cu ft. Records furnished by Corps of Engineers.
01086500. BLACKWATER RESERVOIR on Blackwater River, at Swett's Mills, 1 mile south of Webster, N.H., completed in 1941, used for flood control, has usable capacity of 2,004,000,000 cu ft. Records furnished by Corps of Engineers.
01090700. EVERETT LAKE on Piscataquog River, 1.3 miles southeast of East Weare, N.H., completed in 1962, used for flood control and recreation, has usable capacity of 3,768,000,000 cu ft. Records furnished by Corps of Engineers.
Hopkinton and Everett Lakes, connected by a canal, are operated as a unit above elevation 400.00 ft. Diversion from Hopkinton Lake to Everett Lake in March 1968, April 1969.
01092500. TOWER HILL POND on Maple Falls Brook, 2.3 miles north of Auburn, N.H., completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 cu ft. Records furnished by Manchester Water Works.
01093500. MASSABESIC LAKE on Cohas Brook, 2.5 miles southeast of Manchester, N.H., used for storage of water for municipal supply, has usable capacity of 724,000,000 cu ft. Records furnished by Manchester Water Works.

MONTH-END USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Lake Wentworth	Edward MacDowell Reservoir
Sept. 30, 1971.....	854	118	284	626	16.7
Oct. 31.....	845	102	233	580	16.7
Nov. 30.....	802	118	217	560	17.5
Dec. 31.....	914	113	220	560	19.9
Jan. 31, 1972.....	964	107	226	580	19.1
Feb. 29.....	902	111	246	590	18.3
Mar. 31.....	11,019	148	310	670	24.9
Apr. 30.....	11,575	301	341	840	34.8
May 31.....	11,643	124	345	850	19.1
June 30.....	11,565	120	341	850	19.1
July 31.....	11,405	142	338	810	16.7
Aug. 31.....	11,208	118	326	730	17.5
Sept. 30.....	965	120	306	660	17.5

	Hopkinton Lake	Blackwater Reservoir	Everett Lake	Tower Hill Pond	Massabesic Lake
Sept. 30, 1971.....	8.5	0.2	46.4	171.8	336
Oct. 31.....	13.0	.3	48.1	114.7	351
Nov. 30.....	21.8	.3	47.5	91.0	411
Dec. 31.....	33.1	.8	38.5	116.3	486
Jan. 31, 1972.....	37.1	1.1	38.5	170.0	544
Feb. 29.....	38.6	1.0	38.5	174.5	685
Mar. 31.....	37.2	4.3	55.5	176.2	976
Apr. 30.....	41.8	11.1	54.9	174.5	891
May 31.....	29.2	1.0	49.8	174.5	767
June 30.....	25.3	1.7	50.4	173.5	667
July 31.....	20.9	1.7	48.1	164.7	479
Aug. 31.....	9.8	.4	48.1	173.5	350
Sept. 30.....	5.0	.2	46.4	136.8	332

PARKER RIVER BASIN

01101000 Parker River at Byfield, Mass.

LOCATION.--Lat 42°45'10", long 70°56'46", Essex County, on left bank 1,400 ft downstream from dam, 0.5 mile south of Byfield, 0.7 mile upstream from Wheeler Brook, and 5.5 miles southwest of Newburyport.

DRAINAGE AREA.--21.6 sq mi.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 23.44 ft above mean sea level (levels by Massachusetts Department of Public Works).

AVERAGE DISCHARGE.--27 years, 35.1 cfs (22.07 inches per year).

EXTREMES.--Current year: Maximum discharge, 248 cfs Mar. 24 (gage height, 4.07 ft); minimum daily, 1.4 cfs Oct. 8, 9.
Period of record: Maximum discharge, 489 cfs Mar. 19, 1968 (gage height, 5.61 ft); minimum daily, 0.09 cfs Sept. 25-30, Oct. 3-6, 1957.

REMARKS.--Records excellent except those below 10 cfs, which are good, and those for period of no gage-height record, which are fair. Some regulation at low flow by mill and ponds above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	6.0	6.9	37	24	37	130	62	74	51	75	5.8
2	1.9	6.3	7.0	39	22	40	120	59	115	51	32	4.0
3	1.6	6.9	6.7	41	23	63	110	58	127	50	30	8.7
4	1.6	7.7	55	43	51	71	105	68	119	51	28	17
5	1.6	5.2	49	46	70	90	100	78	121	49	25	29
6	1.6	4.2	43	46	67	102	95	88	120	47	23	37
7	1.5	6.0	43	48	54	107	88	86	121	43	21	34
8	1.4	6.0	41	44	47	117	84	82	115	40	20	31
9	1.4	5.8	39	42	40	127	74	82	113	40	19	26
10	1.9	5.0	38	46	38	130	74	90	134	38	18	24
11	3.0	5.2	40	48	35	135	71	56	144	37	17	21
12	4.2	5.2	41	52	33	134	69	52	142	34	16	19
13	4.0	4.2	41	55	34	130	68	86	130	33	15	17
14	2.0	4.2	39	62	54	122	70	79	117	32	14	16
15	1.9	5.5	38	62	35	100	72	82	105	31	13	16
16	1.8	5.9	40	55	33	98	72	51	94	30	12	16
17	1.8	5.5	41	45	41	112	75	96	85	28	12	15
18	3.0	5.2	42	40	53	139	75	52	76	26	11	14
19	2.2	5.2	40	38	41	176	74	84	70	24	10	13
20	2.3	5.5	37	36	38	194	76	80	64	24	9.1	12
21	2.5	5.9	36	35	43	183	77	84	59	25	8.7	12
22	2.5	11	35	34	43	184	77	86	55	29	7.7	11
23	2.5	14	31	39	43	220	82	82	60	38	7.2	10
24	2.8	15	34	34	43	244	87	75	68	48	6.6	9.4
25	2.6	23	37	36	39	231	86	69	74	55	6.0	9.1
26	3.6	31	38	37	38	212	85	63	72	55	5.5	8.4
27	4.2	42	41	35	38	193	80	54	65	51	5.2	8.4
28	5.0	51	42	32	39	174	74	53	58	47	5.5	7.4
29	5.5	52	42	29	36	160	70	49	51	43	5.5	7.2
30	5.8	64	39	27	-----	149	66	44	50	40	5.0	6.9
31	6.0	-----	37	75	-----	141	-----	40	-----	38	4.5	-----
TOTAL	86.4	422.5	1,320	1,279	1,204	4,315	2,490	2,334	2,798	1,228	447.5	465.3
MEAN	2.79	14.1	42.6	41.3	44.7	139	83.0	75.3	93.3	39.6	14.4	15.5
MAX	6.0	54	70	62	75	244	130	96	144	55	33	37
MIN	1.4	4.2	31	25	22	37	66	40	50	24	4.5	4.0
CFSM	.13	.65	1.97	1.91	2.07	6.44	3.84	3.49	4.32	1.83	.67	.72
IN	.15	.73	2.27	2.20	2.23	7.43	4.29	4.02	4.82	2.11	.77	.80

CAL YR 1971 TOTAL 12,580.6 MEAN 34.5 MAX 163 MIN 1.4 CFSM 1.60 IN 21.67
WTR YR 1972 TOTAL 18,481.7 MEAN 50.5 MAX 244 MIN 1.4 CFSM 2.34 IN 31.83

NOTE.--No gage-height record Apr. 1 to May 10.

IPSWICH RIVER BASIN

69

01101300 Maple Meadow Brook at Wilmington, Mass.

LOCATION.--Lat 42°32'15", long 71°09'41", Middlesex County, on right bank 10 ft upstream from culvert on State Highway 38 and 0.9 mile south-east of Wilmington.

DRAINAGE AREA.--3.99 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 75.71 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1963-72), 6.99 cfs (23.79 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 58 cfs Mar. 23 (gage height, 4.62 ft); maximum gage height, 4.77 ft Mar. 4 (backwater from ice); no flow for many days during year.

Period of record: Maximum discharge, 119 cfs Mar. 19, 1968 (gage height, 5.63 ft), from rating curve extended above 47 cfs on basis of measurements of flow through culvert at gage heights 5.33 and 5.63 ft; no flow for many days each year.

REMARKS.--Records good except those for winter period, which are fair. Water diverted above station for municipal supply of Wilmington since January 1964 (see table below). Recording rain gage at station since March 1963 (no winter records).

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt., 1968: 1964-67 (monthly and yearly runoff and diversions).

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	11	3.5	2.5	7.5	10	8.5	20	5.3	2.7	0
2	0	0	8.6	3.3	2.4	12	15	8.1	28	6.5	2.4	0
3	0	0	6.3	5.2	3.3	20	14	7.5	20	5.4	2.0	.01
4	0	0	5.2	6.5	8.0	40	13	14	15	6.2	1.7	1.5
5	0	0	4.0	7.7	11	36	13	24	32	6.2	1.2	2.0
6	0	0	3.3	7.2	8.0	24	13	19	36	5.4	.84	1.4
7	0	0	4.1	6.6	6.5	25	12	15	27	5.2	.74	.94
8	0	0	5.2	5.6	5.3	25	11	13	20	4.6	.84	.67
9	0	0	4.4	4.5	4.0	10	10	15	18	4.0	.94	.53
10	0	0	4.7	7.1	3.3	24	4.6	20	36	3.5	.49	.46
11	0	0	4.4	10	3.0	19	9.0	14	42	2.4	.74	.36
12	0	0	4.6	10	2.0	17	9.0	16	31	2.3	.60	.25
13	0	0	4.0	9.5	4.0	15	4.5	14	20	2.0	.49	.20
14	0	0	3.4	9.4	16	15	13	14	14	2.5	.46	.20
15	0	0	3.4	8.7	18	15	13	15	11	2.5	.56	.25
16	0	0	4.1	6.9	12	17	12	21	4.3	2.7	.46	.25
17	0	0	4.4	4.5	8.0	24	15	20	9.2	2.4	.39	.23
18	0	0	4.6	3.4	6.6	44	15	17	11	2.0	.34	.20
19	0	0	3.7	4.2	5.0	53	13	14	12	1.5	.29	.15
20	0	0	3.2	4.6	4.0	44	12	13	12	1.3	.23	.19
21	0	0	3.0	3.4	5.4	34	14	15	11	1.1	.20	.19
22	0	0	2.4	3.4	5.6	34	12	17	4.6	.49	.11	.20
23	0	0	2.3	3.4	5.2	55	16	14	11	1.3	.05	.21
24	0	0	2.5	5.0	5.0	55	16	11	11	1.4	.01	.19
25	0	0	4.5	6.2	5.0	44	17	4.3	10	3.0	0	.17
26	0	.74	4.8	5.4	5.0	33	15	8.4	9.2	4.4	0	.12
27	0	2.5	4.6	4.2	3.2	25	13	7.4	8.4	5.0	0	.10
28	0	3.0	4.5	3.3	5.5	21	11	6.6	7.2	4.4	0	.04
29	0	3.3	4.6	2.4	5.0	19	4.4	5.4	6.2	4.1	0	.01
30	0	8.1	4.0	2.9	-----	18	4.1	5.4	4.7	3.6	0	0
31	0	-----	3.7	2.7	-----	17	-----	5.0	-----	3.0	0	-----
TOTAL	0	17.64	139.6	174.0	182.5	871.5	382.2	418.1	513.0	110.64	19.28	11.02
MEAN	0	.59	4.50	5.61	6.24	28.1	12.7	13.5	17.1	3.58	.62	.37
MAX	0	8.1	11	10	18	55	18	24	42	6.5	2.7	2.0
MIN	0	0	2.3	2.7	2.4	7.5	4.0	5.0	5.7	.49	0	0
(†)	1.28	1.44	1.17	1.41	1.35	1.39	1.42	1.49	1.94	1.64	1.71	1.50

CAL YR 1971 TOTAL 1,822.68 MEAN 4.99 MAX 40 MIN 0 MEAN† 6.53 CFSM† 1.64 INF 22.22
WTR YR 1972 TOTAL 2,839.73 MEAN 7.76 MAX 55 MIN 0 MEAN† 9.24 CFSM† 2.32 INF 31.52

PEAK DISCHARGE (BASE, 45 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	0215	4.52	55				
3-23	1615	4.62	58				
6-10	2100	4.27	45				

† Diversion, in cubic feet per second, for municipal supply of Wilmington; records furnished by town of Wilmington.
‡ Adjusted for diversion.

IPSWICH RIVER BASIN

01101500 Ipswich River at South Middleton, Mass.

LOCATION.--Lat 42°34'10", long 71°01'39", Essex County, on right bank in Peabody, 700 ft downstream from Boston Street Bridge at South Middleton, 1.3 miles downstream from Wills Brook, and 2 miles south of Middleton.

DRAINAGE AREA.--43.4 sq mi.

PERIOD OF RECORD.--June 1938 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 44.97 ft above mean sea level (Massachusetts Geodetic Survey bench mark).

AVERAGE DISCHARGE.--34 years, 69.7 cfs (21.81 inches per year), adjusted for diversions.

EXTREMES.--Current year: Maximum discharge, 476 cfs Mar. 23 (gage height, 5.53 ft); minimum, 0.54 cfs Nov. 6, 8.
Period of record: Maximum discharge, 833 cfs Mar. 19, 1968 (gage height, 7.09 ft); minimum, 0.1 cfs Sept. 24, Oct. 1, 1957.

REMARKS.--Records good. Diversions above station for municipal supply of Reading, Lynn, and Peabody (see table below). Occasional regulation by mill above station.

REVISIONS (WATER YEARS).--WSP 1301: 1942(M). WSP 1621: 1938-58 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.0	92	30	17	51	172	106	139	97	43	5.2
2	1.5	7.2	79	30	15	47	162	98	168	86	40	5.0
3	1.3	5.7	68	38	17	143	154	96	167	76	37	23
4	1.2	5.3	60	42	88	188	145	148	177	78	34	58
5	1.3	6.4	61	48	91	189	140	157	289	73	30	49
6	1.5	6.4	55	45	65	185	133	152	366	69	27	42
7	1.6	6.6	43	43	52	209	128	149	306	64	24	38
8	1.8	6.6	44	41	51	260	122	144	254	60	26	34
9	1.6	6.0	42	37	51	290	129	159	235	55	24	29
10	7.2	1.1	43	45	47	284	122	177	314	51	22	25
11	8.4	3.2	45	54	42	254	117	163	317	47	20	21
12	1.8	1.1	45	57	36	226	113	152	274	43	18	19
13	8.0	3.6	43	62	40	206	109	142	245	42	16	19
14	9.4	6.0	42	76	82	194	117	131	217	46	17	23
15	8.9	6.4	39	75	84	175	113	144	188	42	20	29
16	8.0	2.7	45	73	85	153	110	162	159	39	18	27
17	6.8	5.5	47	56	86	187	127	154	142	36	17	24
18	6.0	6.2	45	44	81	300	127	147	130	34	16	22
19	5.7	6.4	40	40	96	368	117	138	121	32	15	20
20	5.3	6.4	36	40	83	362	120	134	116	31	14	20
21	5.3	8.1	32	36	74	355	135	162	110	35	12	18
22	5.0	15	29	33	52	362	125	151	106	42	11	17
23	4.6	5.9	24	32	44	462	140	136	120	45	10	14
24	4.6	11	26	36	43	453	155	126	129	48	9.9	14
25	6.8	17	42	44	40	403	149	116	117	49	9.0	14
26	7.6	72	39	49	40	359	150	107	109	47	7.4	13
27	7.2	61	18	37	38	313	139	99	103	43	7.5	13
28	7.2	59	39	30	38	265	130	92	97	42	7.7	11
29	6.8	60	40	26	41	231	124	84	89	45	6.6	11
30	6.4	92	36	23	-----	210	116	76	89	47	6.4	11
31	5.7	-----	30	21	-----	188	-----	69	-----	43	6.0	-----
TOTAL	156.3	489.62	1,389	1,343	1,619	7,892	3,940	4,071	5,393	1,587	571.5	670.2
MEAN	5.04	16.3	44.8	43.3	55.8	255	131	131	180	51.2	18.4	22.3
MAX	9.4	92	62	76	96	462	172	177	366	97	43	58
MIN	1.2	6.4	24	21	15	51	109	69	89	31	6.0	5.0
(†)	4.79	11.5	21.9	29.6	24.7	24.1	14.7	4.82	4.41	4.34	4.46	4.09

CAL YR 1971 TOTAL 16,499.02 MEAN 45.2 MAX 253 MIN .64 MEAN† 59.9 CFSM† 1.38 INF 18.72
WTR YR 1972 TOTAL 29,120.62 MEAN 79.6 MAX 462 MIN .64 MEAN† 92.3 CFSM† 2.13 INF 28.96

† Diversions, in cubic feet per second, for municipal supply of Reading, Lynn, and Peabody; records furnished by municipalities.

‡ Adjusted for diversions.

IPSWICH RIVER BASIN

71

01102000 Ipswich River near Ipswich, Mass.

LOCATION.--Lat 42°39'35", long 70°53'39", Essex County, on left bank 200 ft downstream from Willowdale Dam, 1.5 miles downstream from Howlett Brook, and 4 miles upstream from Ipswich.

DRAINAGE AREA.--124 sq mi.

PERIOD OF RECORD.--June 1930 to current year. Prior to October 1930, published as "at Willowdale."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 20.63 ft above mean sea level.

AVERAGE DISCHARGE.--42 years, 199 cfs (21.79 inches per year), adjusted for diversions.

EXTREMES.--Current year: Maximum discharge, 1,290 cfs Mar. 24 (gage height, 5.89 ft); minimum, 4.3 cfs Oct. 8.
Period of record: Maximum discharge, 2,680 cfs Mar. 20, 21, 1968 (gage height, 8.41 ft); minimum, 0.8 cfs Aug. 20, 1965.
Maximum discharge since 1886, that of Mar. 20, 21, 1968.

REMARKS.--Records excellent. Diversions above station for municipal supply of Reading, Lynn, Peabody, Danvers, Salem, and Beverly (see table below).
Some regulation by reservoirs.

REVISIONS (WATER YEARS).--WSP 781: Drainage area. WSP 1621: 1930-58 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	10	249	118	75	152	627	323	247	284	145	18
2	7.3	10	237	126	65	168	584	307	290	277	139	17
3	4.3	22	227	133	65	278	567	300	375	272	132	46
4	5.5	25	205	136	125	296	543	349	436	268	123	123
5	5.4	26	182	143	135	409	521	396	506	233	115	152
6	5.0	23	160	135	156	524	492	444	557	236	106	166
7	4.7	27	151	143	143	627	468	445	646	220	96	165
8	5.1	24	147	141	209	600	438	423	744	206	88	150
9	5.6	24	135	134	194	782	409	427	774	197	81	132
10	6.8	22	132	142	166	851	386	462	848	184	77	114
11	10	21	130	146	144	857	368	482	915	171	71	100
12	39	20	125	153	125	802	356	482	941	150	64	83
13	14	19	123	161	123	741	350	457	892	152	58	66
14	26	18	119	177	148	677	366	420	803	149	54	60
15	23	19	117	178	170	585	371	419	706	143	50	66
16	22	20	120	150	222	520	373	441	623	137	61	70
17	20	18	120	145	247	592	390	457	564	130	56	67
18	18	17	120	134	217	784	391	462	506	124	52	62
19	17	18	112	128	175	986	385	460	454	117	49	56
20	15	20	114	117	138	1,090	390	420	413	109	45	54
21	14	22	112	110	130	1,070	400	430	377	108	41	52
22	14	30	107	100	131	1,070	402	423	347	112	37	50
23	15	23	95	102	138	1,190	425	419	341	123	34	47
24	13	26	110	109	147	1,270	445	402	344	131	31	45
25	16	22	120	112	150	1,260	450	375	353	139	28	43
26	21	128	126	105	148	1,140	442	344	356	141	26	41
27	23	152	132	93	142	1,060	418	315	350	140	25	40
28	23	177	142	95	135	943	393	290	327	138	24	37
29	21	203	146	87	141	834	388	267	290	140	23	36
30	20	241	138	87	-----	768	344	245	285	143	21	36
31	21	-----	113	81	-----	680	-----	229	-----	146	20	-----
TOTAL	504.2	1,568	4,354	3,921	4,352	23,675	12,857	12,045	15,623	5,249	1,981	2,194
MEAN	16.3	52.3	140	126	150	764	429	390	521	169	63.9	73.1
MAX	30	241	240	178	247	1,270	627	482	941	284	145	166
MIN	4.3	17	84	81	65	152	344	229	247	108	20	17
(1)	7.76	14.6	60.4	55.3	34.8	27.0	12.0	8.32	8.06	7.49	7.23	6.19

EST YR 1971 TOTAL 54,326.4 MEAN 152 MAX 781 MIN 4.7 MEAN 175 CFSM 1.41 INI 19.16
EST YR 1972 TOTAL 48,573.7 MEAN 141 MAX 1,270 MIN 4.7 MEAN 262 CFSM 2.11 INI 28.90

1 Diversions, in cubic feet per second, for municipal supply of Reading, Lynn, Peabody, Danvers, Salem, and Beverly; records furnished by municipalities.
2 Adjusted for diversions.

MYSTIC RIVER BASIN

01102500 Aberjona River at Winchester, Mass.

LOCATION.--Lat 42°26'00", long 71°08'22", Middlesex County, on left bank at Winchester, 0.5 mile upstream from head of Mystic Lakes.

DRAINAGE AREA.--23.3 sq mi (excludes 1.4 sq mi drained by Winchester Reservoirs).

PERIOD OF RECORD.--April 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--33 years, 27.0 cfs.

EXTREMES.--Current year: Maximum discharge, about 540 cfs Mar. 3 (gage height, about 13.2 ft); minimum, 0.46 cfs Oct. 1, 2, 3, 8-10, 21-24; minimum daily, 0.46 cfs Oct. 9, 22, 23.

Period of record: Maximum discharge, 835 cfs Aug. 19, 1955 (gage height, 13.64 ft), from rating curve extended above 330 cfs; maximum gage height, 14.43 ft Oct. 7, 1962 (backwater from Upper Mystic Lake); no flow for part of Oct. 10, 12, 1950, caused by pumpage from gage pool; minimum daily discharge, 0.25 cfs Oct. 10, 1950.

Maximum discharge since 1886, that of Aug. 19, 1955.

REMARKS.--Records good except those for days of doubtful or no gage-height record, which are fair. Flow affected by diversions for industrial use and for municipal supply of Woburn and Winchester, and by wastage and leakage from Winchester Reservoirs. Some regulation by Winchester at dam 1,800 ft upstream.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2	0.51	1.3	4.0	9.8	8.1	57	68	24	169	36	20	3.1
3	0.50	9.0	26	17	7.9	72	57	37	86	31	15	2.9
4	1.2	5.5	26	23	17	340	40	59	54	30	11	6.4
5	3.7	5.2	17	21	134	300	41	159	71	49	10	6.3
6	4.4	2.9	13	25	59	134	40	92	277	27	8.0	35
7	4.3	2.4	11	17	67	1.3	36	55	155	23	7.2	20
8	4.6	9.5	26	16	5.5	74	40	49	135	21	7.2	11
9	0.53	5.0	17	13	35	146	40	52	123	18	22	8.7
10	0.46	3.2	16	14	25	142	36	54	95	17	14	8.7
11	32	3.6	15	25	19	112	28	96	315	17	11	9.1
12	18	3.4	14	22	17	92	28	53	176	14	8.0	6.3
13	8.9	3.4	12	24	15	74	39	55	119	13	6.9	5.2
14	4.8	2.5	11	23	34	72	58	47	93	26	6.6	5.7
15	2.6	2.0	10	23	62	63	60	32	71	26	13	10
16	1.7	2.4	18	19	48	63	43	112	64	18	15	9.9
17	4.71	1.5	19	13	43	73	40	90	54	14	11	6.9
18	4.59	1.1	15	12	34	144	54	70	66	12	8.3	5.2
19	4.77	1.4	13	12	27	229	34	65	59	11	8.7	4.7
20	4.52	1.5	9.9	12	22	204	38	54	60	11	7.2	6.3
21	0.51	1.4	4.5	13	15	141	62	54	52	10	5.7	6.0
22	4.49	4.7	9.7	14	15	161	70	45	59	9.1	5.2	4.7
23	4.46	23	9.1	14	18	134	63	71	73	9.5	4.7	6.0
24	4.46	19	6.6	13	17	211	91	54	80	22	4.4	4.2
25	4.58	8.4	13	14	14	159	80	41	43	48	3.7	3.5
26	4.6	86	15	17	17	116	64	34	39	45	3.5	3.5
27	3.1	67	13	11	20	103	53	30	34	32	3.4	3.5
28	6.4	44	11	12	23	85	35	27	31	21	9.2	3.7
29	2.5	46	12	11	27	77	32	26	27	16	5.2	3.1
30	1.7	41	10	10	33	68	41	24	24	17	6.2	3.1
31	1.1	79	10	9.6	-----	64	20	21	34	16	3.1	3.9
	4.96	-----	9.6	8.5	-----	66	-----	25	-----	12	3.3	-----
TOTAL	109.41	474.1	457.4	492.7	434.0	3,652	1,443	1,824	2,748	671.6	265.8	336.9
MEAN	3.55	15.9	14.8	15.9	12.7	124	46.1	58.8	91.6	21.7	8.57	11.2
MAX	32	86	40	25	130	340	91	159	315	49	22	6.8
MIN	0.46	1.1	0.6	0.5	7.9	57	28	21	24	9.1	3.1	2.9
CAL YR 1971	TOTAL	7,920.01	MEAN	23.6	MAX	117	MIN	0.46				
WTR YR 1972	TOTAL	13,000.41	MEAN	37.2	MAX	340	MIN	0.46				

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	1815	12.00	181	5-6	1145	12.07	199
2-6	0430	12.13	210	5-15	1300	11.97	176
3-3	-	113.2	1940	6-1	0845	12.36	274
3-8	1415	12.06	197	6-9	0945	12.00	407
3-18	1715	12.32	263	6-16	0800	12.75	391
3-22	2245	12.17	224	9-3	1730	11.99	181

† About.

NOTE.--Doubtful or no gage-height record Mar. 3, 4.

CHARLES RIVER BASIN

73

01103500 Charles River at Charles River Village, Mass.

LOCATION.--Lat 42°15'22", long 71°15'38", Norfolk County, on right bank 0.3 mile downstream from highway bridge at Charles River Village, 0.8 mile downstream from Noanet Brook, and 1.3 miles northeast of Dover.

DRAINAGE AREA.--184 sq mi.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 296 cfs (21.85 inches per year), adjusted for diversions.

EXTREMES.--Current year: Maximum discharge, 1,570 cfs Mar. 23 (gage height, 5.39 ft); minimum, 16 cfs Oct. 5, 6.
 Period of record: Maximum discharge, 3,220 cfs Aug. 23, 1955 (gage height, 9.24 ft) and Mar. 22, 1968 (gage height, 8.72 ft); minimum, 0.5 cfs Oct. 24, 1952 (caused by unusual regulation); minimum daily, 0.9 cfs Oct. 24, 1952.
 Maximum discharge since flood of 1886, that of August 1955 and March 1968. Flood of March 1936 reached a discharge of 3,170 cfs, by computation of flow over dam at site 0.2 mile above station.

REMARKS.--Records good. Diversions above station for municipal supply of Wellesley and Needham. Occasional diversion since 1951 from Sudbury River basin to Charles River; no diversion during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	52	340	169	156	303	779	506	484	639	162	50
2	20	83	347	176	150	402	718	468	515	585	152	47
3	18	110	338	199	142	726	658	454	591	540	148	110
4	17	143	306	222	320	843	605	616	641	490	138	144
5	17	144	258	244	360	960	581	663	735	438	124	168
6	19	134	215	266	408	1,060	551	737	721	391	113	194
7	23	116	224	275	420	1,160	527	703	714	344	96	185
8	23	92	229	259	380	1,270	496	790	722	306	101	162
9	23	85	236	232	338	1,250	469	819	727	274	98	137
10	48	82	240	254	290	1,220	446	854	849	250	95	120
11	66	78	234	285	245	1,160	427	853	826	226	88	110
12	88	72	220	316	212	1,100	405	860	840	206	85	105
13	98	64	205	329	220	1,020	400	842	836	203	80	100
14	92	59	197	348	320	944	415	804	803	220	76	130
15	77	55	197	353	416	842	424	835	749	226	84	160
16	63	55	199	320	477	858	435	829	679	226	96	166
17	53	55	199	235	490	946	470	820	642	223	104	165
18	47	55	196	246	458	1,150	456	815	600	209	111	153
19	41	55	183	228	314	1,300	449	795	609	209	111	172
20	37	54	171	209	225	1,450	473	780	633	230	101	196
21	35	55	157	206	305	1,490	501	807	669	209	90	181
22	34	71	150	204	327	1,480	514	776	726	206	79	199
23	32	76	138	206	295	1,530	601	754	807	206	69	184
24	31	82	147	229	258	1,450	636	727	834	203	61	164
25	48	155	160	250	239	1,400	672	686	849	196	57	142
26	53	222	174	250	228	1,340	687	638	864	196	53	125
27	70	247	179	215	224	1,250	673	596	855	179	52	112
28	75	282	181	217	229	1,130	642	529	810	163	54	98
29	64	276	179	192	250	1,010	598	449	744	155	54	92
30	56	346	179	183	-----	927	552	410	687	169	57	92
31	51	-----	173	166	-----	846	-----	373	-----	155	55	-----
TOTAL	1,438	3,655	6,551	7,503	8,696	38,817	16,240	21,678	21,761	8,476	2,846	4,163
MEAN	46.4	115	211	242	300	1,091	542	699	725	273	91.8	139
MAX	98	346	367	353	490	1,530	779	860	864	639	162	199
MIN	17	52	138	166	142	303	400	373	484	155	52	47
MEANT	53.0	122	218	249	307	1,097	548	706	732	280	98.7	145
CFSMT	.29	.66	1.18	1.35	1.67	5.96	2.98	3.64	3.98	1.52	.54	.79
INT	.33	.74	1.36	1.56	1.80	6.88	3.33	4.43	4.44	1.75	.62	.88
CAL YR 1971	TOTAL	86,919	MEAN	283	MAX	955	MIN	19	MEANT	240	CFSMT	1.30
INT YR 1972	TOTAL	136,642	MEAN	373	MAX	1,530	MIN	17	MEANT	380	CFSMT	2.07
											INT	28.12

1 Adjusted for diversions for municipal supply of Wellesley and Needham. Records of diversion furnished by municipalities and Water Division of Metropolitan District Commission.

CHARLES RIVER BASIN

01104000 Mother Brook at Dedham, Mass.

LOCATION.--Lat 42°15'18", long 71°05'53", Norfolk County, on right bank 100 ft upstream from Washington Street Bridge at Dedham and 0.4 mile downstream from point of diversion from Charles River.

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder. Concrete control since June 10, 1960. Datum of gage is 0.03 ft below mean sea level. Dec. 9, 1931, to June 9, 1960, nonrecording gage at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--41 years, 78.1 cfs.

EXTREMES.--Current year: Maximum discharge, 507 cfs Mar. 15 (gage height, 84.50 ft); minimum, 0.28 cfs Oct. 9, 10.
Period of record: Maximum discharge, 1,040 cfs Mar. 21, 1968 (gage height, 87.18 ft); maximum gage height, 92.90 ft Aug. 24, 1955, from graph based on gage readings; no flow at times.

REMARKS.--Records good except those below 4 cfs, which are fair. Mother Brook is a diversion from Charles River to Neponset River through Dedham and Hyde Park.

REVISIONS (WATER YEARS).--WSP 1301 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	2.6	108	33	33	93	159	159	165	214	34	3.8
2	.56	9.1	96	38	30	133	138	144	163	188	30	2.1
3	.46	11	90	53	27	272	122	139	168	164	25	24
4	.46	15	14	55	99	350	99	201	184	152	25	16
5	.46	12	73	72	105	347	92	222	235	129	21	3.5
6	1.0	9.6	60	71	109	314	77	231	238	110	18	3.0
7	.74	9.1	61	75	118	383	73	247	236	94	15	2.5
8	.46	7.5	57	72	112	446	64	257	236	81	17	1.6
9	.28	5.2	55	63	94	404	57	280	243	71	14	1.6
10	4.9	4.2	56	71	78	426	67	301	302	56	16	1.3
11	7.9	18	57	76	66	394	107	294	300	51	12	1.4
12	5.2	22	62	86	55	340	109	293	272	46	9.1	1.2
13	5.6	19	61	88	57	311	110	283	276	47	8.7	1.4
14	5.6	16	64	93	95	270	125	270	271	54	8.0	1.8
15	4.4	12	65	99	113	368	100	292	255	48	8.8	4.7
16	2.6	4.9	67	87	136	263	90	294	235	47	8.9	7.5
17	2.0	4.7	66	52	146	245	105	283	230	48	10	5.4
18	1.6	4.4	66	67	139	316	129	275	207	44	11	4.8
19	1.3	4.2	61	64	121	336	131	268	208	45	12	7.8
20	1.1	4.4	66	57	74	344	149	269	205	63	11	22
21	1.9	4.2	63	55	73	385	170	283	200	54	8.7	16
22	1.4	9.6	62	53	88	397	158	270	220	67	7.3	24
23	1.3	8.7	55	52	84	418	198	255	254	53	6.8	17
24	1.5	7.5	58	58	72	409	213	244	269	54	6.5	9.2
25	4.0	41	58	63	65	386	218	230	271	47	5.9	5.6
26	4.6	38	55	71	63	359	220	211	276	50	5.3	5.7
27	4.6	49	54	51	61	332	214	190	277	42	5.2	14
28	4.6	65	61	55	62	308	216	169	268	35	5.3	13
29	4.2	63	57	48	72	269	199	144	249	33	5.3	11
30	2.6	108	56	43	-----	328	176	122	233	42	5.0	9.7
31	2.2	-----	58	38	-----	263	-----	108	-----	31	5.0	-----
TOTAL	79.68	608.9	1,599	1,959	2,447	10,229	4,085	7,230	7,146	2,260	380.8	242.6
MEAN	2.57	20.3	50.3	63.2	84.4	330	136	233	238	72.9	12.3	8.09
MAX	7.9	108	98	99	146	446	220	301	302	214	34	24
MIN	.28	2.6	75	33	27	93	57	108	163	31	9.0	1.2
CAL YR 1971	TOTAL	23,536.87	MEAN	64.5	MAX	364	MIN	.16				
WTR YR 1972	TOTAL	39,226.98	MEAN	104	MAX	466	MIN	.28				

CHARLES RIVER BASIN

75

01104200 Charles River at Wellesley, Mass.

LOCATION.--Lat 42°18'59", long 71°13'42", Norfolk County, on left bank at east limits of Wellesley, 30 ft upstream from a horseshoe-shaped dam and 50 ft upstream from bridge on State Highway 9.

DRAINAGE AREA.--211 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 67.92 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 330 cfs (21.24 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Mar. 22 (gage height, 5.15 ft); minimum, 17 cfs Oct. 5, & minimum daily, 25 cfs Oct. 2, 4, 5.

Period of record: Maximum discharge, 2,410 cfs Mar. 21, 1968 (gage height, 6.20 ft); no flow Sept. 15, Oct. 6, 1959 (caused by closing of gates at dam at gage); minimum daily discharge, 1.0 cfs Aug. 24, 31, Sept. 8, 1965.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow affected by diversions for municipal supply of Wellesley, Needham, and Dedham, by diversion to Mather Brook (see sta. 01104000), and at times by diversion from Sudbury River basin. No diversion from Sudbury River basin during year. Occasional regulation at dam 0.2 mile above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	58	292	155	155	287	768	445	440	536	162	66
2	25	90	287	169	148	357	725	419	429	495	155	64
3	28	110	283	198	152	632	671	408	440	456	141	110
4	25	140	266	206	352	753	619	536	467	413	128	150
5	25	150	237	249	333	697	593	548	554	377	122	200
6	26	140	206	241	337	732	560	573	567	347	122	230
7	33	120	213	249	352	843	530	599	560	314	122	220
8	28	105	206	241	337	990	500	625	548	287	125	190
9	30	94	206	217	365	1,020	467	658	573	262	115	160
10	60	90	213	237	279	998	342	711	684	245	101	140
11	92	72	269	253	245	1,010	328	704	684	229	99	130
12	75	60	206	270	209	998	337	684	651	202	100	125
13	89	53	183	292	217	934	337	684	645	209	97	120
14	92	47	180	305	305	982	347	664	638	233	88	155
15	86	45	187	305	337	746	352	718	606	217	90	190
16	75	49	187	279	377	677	372	725	567	217	94	190
17	63	51	187	237	392	942	419	664	548	217	105	195
18	58	51	174	229	382	1,100	413	645	518	217	109	180
19	51	53	173	217	292	1,160	392	625	506	241	110	200
20	45	51	162	202	209	1,210	403	625	512	305	105	210
21	45	53	152	195	253	1,260	424	658	512	296	98	200
22	41	73	138	195	283	1,310	424	625	548	324	90	210
23	35	75	128	191	270	1,330	500	599	612	296	82	200
24	35	75	141	213	249	1,290	524	573	632	324	74	190
25	70	173	155	229	225	1,240	536	548	632	279	72	160
26	65	245	166	233	209	1,210	548	512	638	253	68	140
27	70	237	173	209	209	1,170	548	484	645	217	66	120
28	75	266	166	206	206	1,090	536	451	638	166	66	105
29	72	275	169	187	233	1,030	506	488	606	152	70	100
30	66	333	166	176	-----	910	478	362	567	195	74	100
31	60	-----	169	162	-----	732	-----	337	-----	166	72	-----
TOTAL	1,668	3,434	5,982	6,947	7,852	29,640	14,499	17,817	17,167	8,687	3,124	4,750
MEAN	53.8	114	193	224	271	956	483	575	572	280	101	158
MAX	92	333	292	305	392	1,330	768	725	684	536	162	230
MIN	25	45	128	155	148	287	328	337	429	192	84	64
MEAN†	67.7	165	255	299	366	1,297	631	820	822	365	126	178
CFSM†	.32	.69	1.21	1.42	1.73	6.15	2.99	3.89	3.90	1.73	.60	.84
IN.†	.37	.77	1.39	1.63	1.87	7.09	3.34	4.48	4.35	2.00	.69	.94

CAL YR 1971 TOTAL 72,212.6 MEAN 198 MAX 746 MIN 7.6 MEAN† 275 CFSM† 1.30 IN† 17.68
WTR YR 1972 TOTAL 121,567.0 MEAN 332 MAX 1,330 MIN 25 MEAN† 448 CFSM† 2.12 IN† 28.93

† Adjusted for diversion to Mather Brook and diversions for municipal supply of Wellesley, Needham, and Dedham. Records of diversion furnished by Water Division of Metropolitan District Commission and by municipalities.

NOTE.--No gage-height record Aug. 19 to Sept. 30.

CHARLES RIVER BASIN

01104500 Charles River at Waltham, Mass.

LOCATION.--Lat 42°22'20", long 71°14'03", Middlesex County, on right bank 800 ft downstream from Moody Street Bridge in Waltham and 0.3 mile upstream from Beaver Brook.

DRAINAGE AREA.--227 sq mi, excludes 23.6 sq mi drained by Stony Brook, from which flow is diverted for municipal supply of Cambridge.

PERIOD OF RECORD.--October 1903 to October 1909 (figures of average weekly discharge, equivalent to records of unadjusted discharge at present site), August 1931 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 20.02 ft above mean sea level. Prior to July 10, 1904, at dam 700 ft upstream and July 10, 1904, to Oct. 2, 1909, at dam 0.7 mile downstream at different datum; discharge computed from flow over dam and through wheels and gates of Boston Manufacturing Co. and Waltham Bleachery, respectively.

AVERAGE DISCHARGE.--41 years (1931-72), 373 cfs (22.31 inches per year), adjusted for diversion, wastage, and leakage.

EXTREMES.--Current year: Maximum discharge, 1,670 cfs Mar. 22 (gage height, 4.05 ft); minimum, 21 cfs Oct. 3, 4, 5, 6; minimum daily, 22 cfs Oct. 5.

Period of record: Maximum discharge, 2,670 cfs Mar. 22, 1968 (gage height, 5.15 ft); maximum gage height, 5.39 ft Mar. 22, 1968 (backwater from debris); minimum discharge, 0.1 cfs Oct. 1, 12, 1943; minimum daily, 0.2 cfs Oct. 4, 1943.

Maximum discharge since 1886, that of Mar. 22, 1968.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow affected at times by wastage from Stony Brook Reservoir, wastage and leakage from Norumbega Reservoir, diversion at times prior to 1963 from Lake Cochituate and at times since 1951 from Sudbury River basin, diversion to Mother Brook (see sta. 01104000), and diversions for municipal supply of Wellesley, Needham, and Dedham, all above station. Some regulation by mills upstream. No diversion from Sudbury River basin during year. Low flow completely regulated by Boston Edison Co. powerplant above station prior to 1954.

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 851: Drainage area. WSP 971: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	62	330	165	160	314	770	453	590	573	188	78
2	27	103	366	179	155	391	752	416	578	536	174	86
3	23	108	299	220	162	819	694	448	551	502	160	235
4	23	119	283	220	419	859	650	633	591	463	148	316
5	22	134	254	258	349	778	606	631	829	413	129	234
6	24	136	229	247	342	761	578	636	775	373	132	227
7	34	141	240	250	354	890	540	638	742	337	125	232
8	33	112	223	247	337	1,210	515	558	711	309	146	221
9	31	99	220	233	312	1,140	485	719	716	283	132	232
10	83	95	226	258	284	1,090	475	793	962	262	120	197
11	119	89	226	261	257	1,040	346	783	934	240	109	163
12	83	72	216	280	226	1,050	445	736	857	220	108	141
13	85	61	200	299	243	984	377	741	804	225	102	134
14	91	58	191	310	334	1,010	382	716	758	254	98	124
15	89	55	203	306	331	893	368	835	710	230	56	76
16	79	56	203	282	362	718	382	862	659	221	96	130
17	67	59	194	248	379	1,130	445	761	683	218	107	190
18	61	61	191	236	376	1,410	410	731	609	212	120	180
19	55	62	188	230	338	1,410	395	714	605	223	124	250
20	50	61	179	215	237	1,390	435	725	603	280	119	220
21	47	67	168	210	245	1,410	460	781	592	267	112	210
22	44	101	151	202	299	1,500	445	742	620	303	103	270
23	39	93	139	201	277	1,630	589	694	699	249	93	230
24	38	87	154	225	259	1,540	611	637	709	265	85	200
25	72	236	162	241	235	1,420	595	602	687	233	80	180
26	69	291	173	223	234	1,330	584	563	693	227	76	150
27	64	268	179	215	225	1,250	573	523	681	208	78	130
28	71	306	179	213	229	1,170	545	482	662	189	76	119
29	77	310	176	199	253	1,090	520	438	629	177	71	110
30	72	415	179	183	-----	967	491	393	602	200	71	105
31	64	-----	182	169	-----	764	-----	373	-----	167	71	-----
TOTAL	1,761	3,917	6,443	7,221	8,213	33,358	15,463	19,757	20,621	8,839	3,499	5,368
MEAN	56.8	131	208	233	263	1,076	515	637	694	286	112	174
MAX	119	415	330	310	419	1,630	770	862	962	973	188	316
MIN	22	55	139	165	155	314	346	373	551	167	71	74
MEAN†	70.5	161	240	307	379	1,417	663	802	944	371	136	190
CFSMT	0.31	0.71	1.19	1.35	1.67	6.24	2.92	3.89	4.16	1.63	0.60	0.84
IN.†	0.86	0.79	1.37	1.56	1.80	7.20	3.36	4.48	4.64	1.88	0.69	0.94
CAL. YR 1971	TOTAL 80,742	MEAN 221	MAX 837	MIN 20	MEAN† 207	CFSMT 1.31	IN† 17.77					
YR 1972	TOTAL 136,640	MEAN 368	MAX 1,630	MIN 22	MEAN† 483	CFSMT 2.13	IN† 28.97					

† Adjusted for diversion to Mother Brook, diversions for municipal supply of Wellesley, Needham, and Dedham, wastage from Stony Brook Reservoir, and wastage and leakage from Norumbega Reservoir. Records of diversion, wastage, and leakage furnished by Water Division of Massachusetts Department of Conservation and by municipalities.

NOTE.--No gage-height record Sept. 16-20.

NEPONSET RIVER BASIN

77

01105000 Neponset River at Norwood, Mass.

LOCATION.--Lat 42°10'39", long 71°12'05", Norfolk County, on left bank 200 ft upstream from Pleasant Street Bridge, 200 ft downstream from Penn Central Railroad bridge, 0.45 mile downstream from Hawes Brook, and 0.5 mile south of Norwood.

DRAINAGE AREA.--35.2 sq mi.

PERIOD OF RECORD.--October 1939 to current year. October 1939 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 44.04 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--33 years, 51.9 cfs.

EXTREMES.--Current year: Maximum discharge, 427 cfs Mar. 3 (gage height, 8.25 ft, at upstream side of railroad bridge); minimum daily, 3.4 cfs Oct. 8.

Period of record: Maximum discharge, 1,490 cfs Aug. 19, 1955 (gage height, 14.65 ft, from floodmarks); minimum daily, 1.4 cfs Oct. 20, 1963.

Maximum discharge since 1886, that of Aug. 19, 1955. Flood of July 24, 1938, reached a stage of 11.05 ft, from floodmarks.

REMARKS.--Records good. Flow regulated by mills and reservoirs above station. Several diversions above station for municipal and industrial use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	13	66	26	21	89	102	68	138	75	18	10
2	5.4	42	44	35	20	121	94	68	142	68	18	9.0
3	6.7	33	30	52	32	346	92	84	112	55	13	75
4	22	25	25	51	165	365	87	172	90	58	12	76
5	17	16	24	60	116	232	89	168	114	48	10	53
6	5.0	15	23	47	87	169	81	138	108	42	10	36
7	3.7	18	34	38	62	144	75	120	97	40	14	25
8	3.4	15	33	34	48	212	68	111	94	34	14	18
9	4.8	11	25	33	41	227	69	146	103	34	14	16
10	29	9.7	23	48	37	182	56	189	183	33	14	19
11	57	7.5	23	52	33	148	55	172	177	29	13	17
12	20	7.5	24	51	31	133	58	142	138	19	12	13
13	11	7.1	19	51	62	127	66	123	108	32	11	13
14	13	8.4	14	56	111	116	82	112	97	47	10	18
15	12	7.9	18	51	67	122	78	162	87	34	16	17
16	10	6.7	24	46	71	135	73	183	80	31	18	18
17	9.2	6.3	23	34	59	253	70	162	109	25	13	18
18	11	6.3	21	27	52	375	68	139	117	19	14	16
19	7.9	5.0	20	28	63	310	60	115	141	18	15	28
20	6.7	6.7	18	28	72	233	84	126	157	20	13	55
21	5.4	10	16	34	65	195	102	158	155	21	8.8	46
22	5.8	18	16	37	48	208	99	149	142	18	7.0	76
23	5.4	17	14	38	40	269	138	125	144	19	7.3	74
24	6.7	15	19	40	39	249	142	106	134	21	7.9	48
25	13	66	29	41	36	201	128	94	115	17	8.1	34
26	14	83	29	37	39	174	108	84	97	16	8.6	36
27	12	65	26	31	45	148	90	71	83	13	38	36
28	9.7	63	25	28	45	136	82	69	78	11	24	36
29	8.4	60	24	27	56	120	77	58	74	11	15	36
30	7.5	90	24	29	-----	118	71	55	78	12	12	18
31	8.4	-----	29	26	-----	108	-----	53	-----	13	11	-----
TOTAL	358.4	754.1	782	1,216	1,692	9,965	2,344	3,722	3,492	933	426.7	998.0
MEAN	11.6	25.1	25.2	39.2	58.4	192	84.8	120	116	30.1	13.8	33.0
MAX	97	90	66	60	165	375	142	189	183	75	38	76
MIN	3.4	5.0	14	26	20	89	55	53	74	11	7.0	9.0
CAL YR 1971	TOTAL 19,184.4			MEAN 41.6	MAX 233	MIN 2.8						
WTR YR 1972	TOTAL 22,876.2			MEAN 62.5	MAX 375	MIN 3.4						

NEPONSET RIVER BASIN

01103500 East Branch Neponset River at Canton, Mass.

LOCATION.--Lat 42°09'16", long 71°08'47", Norfolk County, on right bank 100 ft downstream from Washington Street Bridge at Canton, 200 ft downstream from Forge Pond Dam, and 900 ft downstream from Massapoag Brook.

DRAINAGE AREA.--27.2 sq mi.

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 80.18 ft above mean sea level (Massachusetts Department of Public Works bench mark).

AVERAGE DISCHARGE.--20 years, 50.4 cfs.

EXTREMES.--Current year: Maximum discharge, 450 cfs Mar. 3 (gage height, 3.98 ft); minimum daily, 5.0 cfs Oct. 23.

Period of record: Maximum discharge, 1,790 cfs Aug. 19, 1955 (gage height, 8.18 ft), from rating curve extended above 690 cfs; minimum daily, 0.6 cfs July 7, Sept. 1, 1957.

REMARKS.--Records fair. Flow regulated by Forge, Bolivar, Massapoag, and Reservoir Ponds, and other ponds above station. Diversion above station for municipal supply of Canton and Stoughton.

REVISIONS.--WSP 1901: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	8.1	61	39	23	99	85	42	101	60	35	17
2	5.7	35	36	45	22	132	80	47	103	56	31	17
3	7.2	33	26	78	28	320	71	51	71	43	25	86
4	8.9	23	23	62	137	280	69	119	62	40	23	128
5	9.5	16	20	77	90	180	70	99	98	35	22	53
6	9.2	11	19	60	53	154	48	73	85	34	19	33
7	9.2	17	37	49	45	148	45	65	65	29	15	24
8	10	18	36	45	42	204	44	73	70	23	31	22
9	6.7	13	30	42	40	204	42	129	85	28	30	22
10	19	11	26	60	37	160	33	196	177	28	27	22
11	44	10	25	56	34	135	38	132	134	26	24	19
12	19	9.5	26	50	31	126	40	119	90	25	22	16
13	13	8.9	28	44	43	125	55	101	75	40	22	22
14	11	8.4	23	46	94	117	55	91	73	52	21	20
15	9.2	8.1	28	43	68	120	53	163	67	41	29	31
16	7.6	8.9	32	38	56	135	47	184	62	33	25	27
17	7.3	8.7	30	33	47	251	50	147	100	30	22	24
18	7.8	8.1	23	31	44	303	50	129	109	26	23	22
19	7.1	10	26	33	52	213	48	118	123	24	22	30
20	11	8.1	23	34	70	175	77	125	152	30	20	61
21	8.1	8.7	24	40	64	166	64	153	134	33	17	43
22	6.9	13	26	39	58	172	85	126	117	59	16	40
23	5.0	15	22	37	49	214	117	107	124	37	15	40
24	5.6	13	25	39	46	173	101	83	118	35	19	30
25	7.3	56	36	34	44	151	101	69	79	30	20	30
26	10	97	30	34	45	138	91	61	58	29	19	27
27	8.7	56	29	31	40	132	82	60	66	26	25	24
28	7.6	51	30	28	52	124	75	57	54	22	23	23
29	6.9	44	28	28	56	123	68	52	54	21	20	22
30	6.0	93	28	28	-----	112	49	48	65	33	19	25
31	6.3	-----	40	24	-----	95	-----	45	-----	26	18	-----
TOTAL	310.5	720.5	898	1,330	1,528	5,186	1,933	3,064	2,771	1,654	699	1,008
MEAN	10.0	23.0	29.0	42.9	52.7	167	64.4	98.8	92.4	54.0	22.5	33.6
MAX	44	97	81	78	137	320	117	196	177	60	35	128
MIN	5.0	8.1	19	24	22	95	33	42	54	21	15	16
CAL YR 1971	TOTAL	13,666.0	MEAN	37.4	MAX	296	MIN	2.0				
WTR YR 1972	TOTAL	20,562.0	MEAN	56.0	MAX	320	MIN	5.0				

WEYMOUTH BACK RIVER BASIN

79

01105600 Old Swamp River near South Weymouth, Mass.

LOCATION.--Lat 42°11'25", long 70°56'43", Norfolk County, on left bank between divided lanes of State Highway 3 and 128, 100 ft downstream from unnamed tributary entering from left, 0.4 mile upstream from Whitmans Pond, and 1.2 miles north of South Weymouth.

DRAINAGE AREA.--4.29 sq mi.

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 9.63 cfs (30.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 137 cfs Mar. 3 (gage height, 3.80 ft); minimum, 0.12 cfs Oct. 2-6.

Period of record: Maximum discharge, 566 cfs Mar. 18, 1968 (gage height, 5.22 ft); maximum gage height, 5.35 ft Feb. 15, 1971 (ice jam); minimum discharge, 0.11 cfs Sept. 5, 6, 9, 10, 1971.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.86	27	7.4	4.5	30	8.7	7.7	8.7	5.5	5.9	.44
2	.14	13	14	12	4.2	47	8.4	6.7	7.4	4.5	4.4	.41
3	.12	8.0	9.0	20	9.3	99	8.0	9.3	6.0	3.6	3.0	31
4	.12	6.0	7.7	18	41	64	8.0	41	5.5	3.3	4.4	53
5	.12	3.8	6.5	23	21	28	8.4	30	9.3	2.7	2.6	17
6	.64	2.9	6.0	18	13	22	8.0	17	7.4	2.7	2.0	7.7
7	.35	4.0	10	11	8.7	19	7.0	12	7.7	2.2	1.9	5.0
8	.23	3.8	9.3	8.7	8.0	42	7.0	13	9.0	2.0	2.6	3.3
9	.21	3.1	7.4	8.0	7.4	45	6.7	28	12	1.9	2.0	2.8
10	9.6	2.5	7.0	15	6.7	25	6.5	59	30	1.7	1.6	2.8
11	12	2.3	6.7	13	6.0	16	6.7	33	22	1.5	1.3	2.0
12	6.5	2.3	6.2	11	5.7	13	6.5	23	12	1.4	1.2	1.7
13	3.1	2.3	5.7	9.7	11	13	9.3	17	8.7	3.3	1.1	1.6
14	1.7	2.2	5.5	9.3	15	12	12	13	7.0	3.8	.98	2.8
15	1.2	1.9	6.0	8.4	13	14	9.3	36	6.0	2.3	2.1	3.3
16	.94	1.7	7.4	7.4	9.7	23	8.4	38	5.5	1.9	1.3	2.3
17	.78	1.6	6.7	7.4	8.4	74	9.0	23	16	1.5	1.1	1.9
18	.53	1.6	6.2	6.2	7.4	67	8.0	17	13	1.4	1.6	1.6
19	.53	1.6	5.7	5.2	17	31	7.0	13	21	1.1	1.3	4.4
20	.48	1.6	5.2	5.2	32	21	15	20	21	1.4	1.1	9.4
21	.48	2.7	5.7	6.5	23	16	20	35	13	1.9	.91	7.7
22	.48	6.2	6.0	6.7	20	22	14	24	10	2.9	.70	25
23	.48	6.2	5.5	6.7	17	38	30	15	12	2.2	.59	14
24	.53	4.7	7.4	7.0	13	26	29	11	11	3.1	.56	7.7
25	.94	38	12	7.4	9.7	17	19	9.7	8.7	2.7	.52	5.4
26	.94	47	9.3	6.2	9.7	13	13	8.7	7.0	2.9	.52	4.6
27	.86	20	7.7	5.7	11	11	10	7.7	6.2	2.2	.84	3.8
28	.86	20	7.4	5.2	11	10	9.3	7.0	5.7	1.9	.70	3.1
29	.86	17	7.0	4.7	16	9.3	8.7	6.2	5.0	2.2	.56	2.8
30	.78	46	6.2	4.7	-----	8.7	7.7	6.0	5.5	3.6	.48	3.0
31	.78	-----	8.0	4.5	-----	8.4	-----	5.5	-----	2.3	.48	-----
TOTAL	47.43	274.86	247.4	289.2	379.4	884.4	328.6	592.5	319.3	77.6	50.34	231.55
MEAN	1.53	9.16	7.98	9.33	13.1	28.5	11.0	19.1	10.6	2.50	1.62	7.72
MAX	12	47	27	23	41	99	30	99	30	5.5	3.9	53
MIN	.12	.86	5.2	4.5	4.2	8.4	6.5	5.5	5.0	1.1	.48	.41
CFSM	.36	2.14	1.86	2.17	3.05	6.64	2.96	4.45	2.47	.38	.38	1.80
IN.	.41	2.38	2.15	2.51	3.29	7.67	2.85	9.14	2.77	.67	.44	2.01

CAL YR 1971 TOTAL 2,555.99 MEAN 7.00 MAX 72 MIN .11 CFSM 1.63 IN 22.16
WTR YR 1972 TOTAL 3,722.58 MEAN 10.2 MAX 99 MIN .12 CFSM 2.38 IN 32.28

PEAK DISCHARGE (BASE, 90 CPS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1919	3.80	137				
3-17	1900	3.65	110				

NORTH RIVER BASIN

01105730 Indian Head River at Hanover, Mass.

LOCATION.--Lat 42°06'02", long 70°49'23", Plymouth County, on right bank at downstream side of Elm Street Bridge, 0.3 mile upstream from Iron Mine Brook, and 1 mile southwest of Hanover.

DRAINAGE AREA.--30.3 sq mi.

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.16 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 60.8 cfs (27.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 601 cfs Mar. 3 (gage height, 5.13 ft); minimum, 1.2 cfs Oct. 1; minimum daily, 1.6 cfs Oct. 1. Period of record: Maximum discharge, 1,390 cfs Mar. 18, 1968 (gage height, 7.13 ft); minimum, 0.18 cfs July 13, 14, 1971; minimum daily, 0.23 cfs July 14, 1971.

REMARKS.--Records good. Some regulation by mills and by Wampatuck, Indian Head, Maquan, and other ponds above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	7.3	151	45	28	151	80	55	54	54	67	5.5
2	2.4	35	87	45	26	193	71	54	56	46	66	5.2
3	1.7	39	62	95	31	378	68	60	45	37	48	149
4	2.3	26	52	84	173	475	65	238	38	33	54	352
5	1.9	18	44	122	125	251	71	222	53	29	35	203
6	2.3	14	38	95	71	182	65	146	52	27	28	104
7	5.7	15	57	67	53	148	62	110	47	26	22	65
8	4.4	18	61	55	45	206	59	100	57	23	24	48
9	3.9	16	53	48	40	245	59	146	69	21	22	47
10	14	14	48	87	38	176	56	285	148	19	18	40
11	42	13	48	85	34	134	55	214	130	18	14	32
12	23	13	42	74	31	116	56	158	79	17	13	31
13	13	13	38	65	40	115	64	125	60	19	13	37
14	9.7	11	34	64	101	106	97	101	53	36	12	32
15	7.6	10	38	55	62	137	76	155	46	29	29	44
16	7.0	9.7	51	46	68	185	65	194	40	22	22	35
17	6.2	9.7	45	31	55	315	69	146	74	19	17	27
18	5.7	9.3	39	32	48	445	66	113	95	17	14	24
19	4.9	9.7	34	34	148	264	59	94	124	15	13	35
20	4.9	9.3	34	34	283	182	91	101	147	13	11	105
21	4.6	11	37	39	193	148	148	175	97	13	10	84
22	4.9	26	38	42	134	152	107	137	78	20	5.3	81
23	4.9	30	33	42	94	243	160	100	93	20	5.3	80
24	5.1	23	37	44	75	196	175	80	87	21	8.7	58
25	6.0	101	67	44	66	154	137	68	68	26	5.0	48
26	7.0	194	56	39	67	128	107	60	58	35	7.8	43
27	6.8	107	49	31	73	110	88	54	53	29	8.0	38
28	6.8	89	47	31	77	97	75	49	46	22	8.9	32
29	6.2	81	44	31	106	87	67	45	41	23	8.5	30
30	5.7	185	40	28	-----	80	60	41	43	31	7.4	34
31	6.0	-----	50	29	-----	77	-----	39	-----	27	6.6	-----
TOTAL	226.2	1,157.0	1,554	1,663	2,405	5,876	2,478	3,665	2,131	787	639.5	1,948.7
MEAN	7.33	38.6	50.1	53.6	82.9	190	82.6	118	71.0	25.4	20.6	65.0
MAX	42	194	151	122	283	475	175	285	148	54	67	352
MIN	1.6	7.3	33	28	26	77	55	39	38	13	6.6	5.2
CFSM	.24	1.27	1.65	1.77	2.74	6.27	2.73	3.89	2.34	.84	.88	2.15
IN.	.28	1.42	1.91	2.04	2.95	7.21	3.94	4.93	2.62	.97	.79	2.39

CAL YR 1971 TOTAL 14,549.31 MEAN 49.3 MAX 440 MIN .23 CFSM 1.50 IN 20.32
 MTR YR 1972 TOTAL 24,532.40 MEAN 67.0 MAX 475 MIN 1.6 CFSM 2.21 IN 30.12

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	0015	4.17	315	5-4	1830	4.01	283
3-3	2400	5.13	601	5-10	1200	4.11	302
3-18	0545	4.83	499	9-4	0545	4.43	380

JONES RIVER BASIN

81

01105870 Jones River at Kingston, Mass.

LOCATION.--Lat 41°59'27", long 70°44'03", Plymouth County, on left bank 100 ft downstream from Elm Street Bridge, at Kingston, 2.8 miles upstream from mouth.

DRAINAGE AREA.--15.8 sq mi, excludes 4.09 sq mi above outlet of Silver Lake from which flow is diverted for municipal supply of Brockton and Whitman.

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 30.9 cfs.

EXTREMES.--Current year: Maximum discharge, 378 cfs Sept. 4 (gage height, 4.41 ft); maximum gage height, 4.63 ft Feb. 19 (backwater from tide); minimum daily discharge, 7.6 cfs Oct. 9, 24-26.
Period of record: Maximum discharge, 575 cfs Mar. 19, 1968 (gage height, 4.60 ft); maximum gage height, 4.65 ft May 26, 1967 (backwater from tide); minimum daily discharge, 0.59 cfs Aug. 11, 1966.

REMARKS.--Records fair. Flow regulated by pond above station. Flow affected at times during springs of 1968-72 by wastage from 4.09 sq mi above outlet of Silver Lake. Surface flow may be affected by ground water that enters from or moves into adjacent basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	9.8	89	23	15	60	48	34	36	24	32	14
2	8.5	78	55	23	15	64	49	32	42	24	39	14
3	9.0	17	42	28	21	100	48	32	37	22	32	136
4	8.5	17	34	26	44	139	44	84	34	22	29	335
5	8.1	17	29	34	46	118	42	111	29	21	28	214
6	8.5	14	24	36	39	100	42	84	28	20	22	106
7	9.8	14	23	32	36	76	42	68	29	19	19	58
8	8.5	14	23	26	31	82	42	58	51	19	17	28
9	7.6	13	23	24	24	80	41	58	58	20	16	29
10	11	13	26	28	23	64	41	104	53	20	16	20
11	20	13	23	32	21	55	36	104	51	19	14	13
12	16	11	22	34	20	51	32	82	39	19	13	8.5
13	15	12	21	32	21	51	41	66	32	20	13	9.0
14	12	9.8	19	29	31	51	49	58	32	21	13	9.0
15	11	9.8	17	24	41	80	53	62	29	21	19	9.0
16	9.8	9.8	23	23	36	106	48	76	26	20	19	9.8
17	9.0	9.8	24	20	29	126	48	68	25	18	18	9.8
18	9.0	11	19	19	29	147	44	60	31	18	16	11
19	9.0	11	18	19	44	126	37	53	51	18	14	20
20	9.0	11	19	19	133	97	46	49	72	17	14	41
21	9.0	13	18	18	139	82	66	68	58	18	13	42
22	8.5	14	19	18	89	74	62	68	49	22	12	41
23	9.1	28	18	21	57	114	72	57	48	25	12	44
24	7.6	24	15	23	44	106	78	48	48	28	9.8	32
25	7.6	44	22	23	42	86	72	41	39	26	9.8	25
26	7.6	78	23	17	37	68	62	37	25	24	9.9	22
27	9.1	57	23	23	37	60	51	31	23	24	11	19
28	9.1	76	23	18	46	55	44	29	23	24	12	17
29	9.1	62	24	18	51	49	39	29	22	22	13	15
30	9.1	102	17	18	-----	49	37	29	21	19	13	15
31	9.9	-----	23	17	-----	44	-----	28	-----	19	13	-----
TOTAL	207.7	767.0	797	745	1,250	2,560	1,456	1,808	1,141	653	531.4	1,366.1
MEAN	6.7	24.6	25.7	24.0	41.4	82.6	48.9	58.3	38.0	21.1	17.1	45.5
MAX	20	102	89	36	139	147	78	111	72	28	19	335
MIN	7.6	9.0	18	17	18	44	32	28	21	17	9.8	8.5

CAL FOR 1971 TOTAL 8,827.1 MEAN 26.2 MAX 123 MIN 4.9
FOR 1972 TOTAL 13,401.6 MEAN 46.6 MAX 335 MIN 7.6

HERRING RIVER BASIN

01105880 Herring River at North Harwich, Mass.

LOCATION.--Lat 41°42'00", long 70°06'27", Barnstable County, on left bank 30 ft upstream from bridge on U. S. Route 6, 0.6 mile northeast of North Harwich, 1.1 miles downstream from Hinckleys Pond, and 2 miles northwest of Harwich.

DRAINAGE AREA.--About 9.4 sq mi.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 9.59 cfs.

EXTREMES.--Current year: Maximum discharge, 59 cfs Sept. 3 (gage height, 4.43 ft); minimum, 1.0 cfs Oct. 6.
Period of record: Maximum discharge, 59 cfs Sept. 3, 1972 (gage height, 4.43 ft); maximum gage height, 4.88 ft June 6, 1967; minimum discharge, 0.85 cfs Oct. 4-9, 1966.

REMARKS.--Records fair. Flow regulated by many ponds above station--some with no outlets. Surface flow may be affected by ground water that enters from or moves into adjacent basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.7	4.0	1.4	1.8	4.0	7.8	8.9	7.4	17	12	7.8
2	1.5	1.9	7.0	1.3	1.8	4.0	7.6	12	6.5	16	12	7.4
3	1.2	2.2	6.0	1.3	2.0	4.7	7.1	12	7.4	16	11	24
4	1.1	2.5	5.2	1.4	3.0	5.1	7.1	14	13	16	11	23
5	1.1	2.4	4.5	1.5	2.4	5.8	7.1	14	12	15	11	20
6	1.1	2.1	4.0	1.4	2.2	5.8	6.9	14	12	15	10	18
7	1.5	2.1	4.7	1.3	2.5	5.6	6.9	14	11	14	10	16
8	1.2	1.9	4.1	1.1	2.5	5.6	6.9	14	11	14	9.9	16
9	1.1	1.8	4.0	1.2	2.2	5.6	6.9	14	11	13	9.7	15
10	1.7	1.8	3.7	1.7	2.4	5.6	6.9	14	11	13	9.2	14
11	1.8	1.7	3.5	1.4	2.7	5.6	6.7	13	9.9	13	9.0	13
12	1.7	1.7	3.4	1.4	2.7	5.6	6.9	13	10	13	8.8	13
13	1.6	1.7	3.4	1.4	2.9	5.6	7.4	12	9.9	13	8.7	14
14	1.4	1.6	3.1	1.6	2.9	5.6	7.8	12	9.2	14	8.6	16
15	1.4	1.6	3.1	1.5	3.0	6.0	7.4	14	8.9	14	9.4	15
16	1.4	1.7	3.1	1.5	2.9	5.8	7.4	14	8.7	14	9.0	15
17	1.4	1.7	3.0	1.4	2.5	6.2	8.0	14	8.9	14	8.8	15
18	1.4	1.6	3.0	1.4	2.2	6.3	7.6	14	8.9	13	8.7	14
19	1.4	1.6	3.1	1.5	3.7	6.3	7.4	14	18	13	8.7	17
20	1.4	1.7	3.2	1.5	3.5	6.2	8.7	14	17	13	8.8	23
21	1.4	1.8	2.9	1.7	3.2	6.0	9.2	15	16	13	8.6	21
22	1.4	2.8	1.3	1.7	3.1	6.2	8.5	15	16	13	8.5	20
23	1.4	2.7	1.3	1.6	3.1	6.9	10	14	16	14	8.3	18
24	1.4	2.6	1.3	1.6	3.7	6.2	11	13	16	15	8.2	17
25	1.7	3.0	1.5	1.7	3.5	6.2	11	14	15	15	8.2	16
26	1.7	5.0	1.5	1.6	3.8	6.5	13	12	15	15	8.1	16
27	1.8	4.5	1.5	1.5	4.1	6.3	15	13	14	15	8.4	16
28	1.8	5.5	1.5	1.5	4.4	6.9	9.2	12	14	14	8.3	15
29	1.8	5.0	1.3	1.6	4.3	7.4	6.5	12	14	14	8.2	15
30	1.8	9.0	1.4	1.6	-----	7.4	6.3	12	17	12	8.1	17
31	1.8	-----	1.5	1.7	-----	7.8	-----	9.7	-----	12	7.8	-----
TOTAL	46.3	78.9	100.1	46.0	45.0	184.8	246.2	486.6	364.7	435	285.0	487.2
MEAN	1.49	2.63	3.23	1.48	2.93	5.96	8.21	13.1	12.2	14.0	9.19	16.2
MAX	1.9	9.0	8.0	1.7	4.4	7.8	15	15	18	17	12	24
MIN	1.1	1.6	1.3	1.1	1.8	4.0	6.3	8.9	6.5	12	7.8	7.4

CAL YR 1971 TOTAL 2,632.7 MEAN 7.21 MAX 19 MIN 1.1
WTR YR 1972 TOTAL 2,765.8 MEAN 7.56 MAX 24 MIN 1.1

NOTE.--No gage-height record Nov. 10 to Dec. 4, Sept. 13-30.

13
1.19

WEST BRANCH WESTPORT RIVER BASIN

83

01106000 Adamsville Brook at Adamsville, R.I.

LOCATION.--Lat 41°33'30", long 71°07'47", Newport County, on right bank 0.2 mile upstream from milldam at Adamsville and 0.7 mile upstream from mouth.

DRAINAGE AREA.--7.91 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 16, 1942. Altitude of gage is 15 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 14.1 cfs (24.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 231 cfs June 19 (gage height, 6.87 ft); minimum, 0.05 cfs Oct. 1-3, 5.
Period of record: Maximum discharge, 316 cfs Dec. 27, 1969 (gage height, 7.65 ft); maximum gage height, 7.70 ft Mar. 18, 1968; minimum discharge, 0.03 cfs Sept. 23, 24, Oct. 3, 4, 1950, Sept. 24, 25, 29, 1971.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1701: 1955-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.40	35	11	5.5	48	19	16	14	14	12	4.8
2	0.05	0.65	26	11	5.2	39	18	15	14	13	10	4.0
3	0.05	1.0	19	13	6.2	44	17	16	13	12	8.6	27
4	0.09	1.6	15	14	22	65	17	58	13	11	12	53
5	0.09	1.3	12	25	25	57	19	83	13	9.9	9.5	41
6	0.09	1.3	9.9	24	20	52	18	53	12	9.1	8.6	26
7	0.09	1.2	12	18	15	40	17	35	12	8.2	7.8	19
8	0.09	1.2	12	14	13	34	16	26	12	7.5	7.1	14
9	0.07	1.2	11	13	11	33	15	26	11	7.5	6.2	11
10	0.24	1.2	10	24	9.9	28	14	47	12	7.1	5.5	8.6
11	1.5	1.2	9.5	26	8.6	23	14	44	11	6.8	5.2	7.1
12	2.8	1.2	4.6	22	7.8	21	14	35	10	6.5	4.5	6.5
13	4.1	1.1	9.0	19	8.6	22	19	24	9.9	6.2	4.2	6.2
14	3.8	1.2	7.2	17	15	22	35	22	9.5	6.5	4.2	6.5
15	2.4	1.1	8.0	15	20	39	33	38	8.6	6.5	6.5	6.8
16	1.8	1.1	8.6	12	20	64	26	58	7.8	6.5	5.5	6.2
17	1.5	1.1	8.3	9.7	17	67	24	47	20	6.5	5.5	6.2
18	1.1	1.1	7.8	8.8	15	95	21	35	34	5.8	5.2	5.8
19	0.82	1.1	7.0	9.2	42	63	19	26	159	5.8	4.8	26
20	0.61	1.1	7.1	8.8	125	42	22	28	180	5.5	4.5	132
21	0.61	1.7	7.5	9.7	69	31	35	56	87	5.2	3.7	85
22	0.52	1.9	7.3	9.2	41	30	32	50	50	4.5	3.5	58
23	0.76	2.4	6.6	9.7	26	50	48	35	46	4.0	3.2	43
24	0.73	2.9	6.5	9.7	20	49	54	26	46	4.5	3.2	31
25	0.88	9.2	8.9	9.2	18	38	50	21	38	11	3.0	24
26	0.89	10	9.3	8.2	19	28	37	17	28	78	2.7	20
27	0.71	9.0	9.7	7.5	22	24	28	16	22	64	7.1	17
28	0.52	12	9.5	6.8	31	20	22	15	18	39	6.5	14
29	0.60	13	8.8	4.5	45	19	19	14	15	24	6.5	12
30	0.65	35	9.1	6.2	-----	17	17	13	15	17	6.5	12
31	0.55	-----	12	5.8	-----	17	-----	13	-----	13	5.8	-----
TOTAL	28.76	114.54	337.2	603.0	702.6	1,221	741	1,012	940.8	626.1	189.1	733.7
MEAN	0.93	3.68	10.9	13.0	24.2	39.4	24.7	32.6	31.4	13.7	6.10	24.5
MAX	4.1	35	35	26	125	95	56	58	180	78	12	132
MIN	0.05	0.40	6.5	5.8	5.2	17	16	13	7.8	4.0	3.7	4.0
CFSM	0.12	0.50	1.38	1.64	3.05	4.98	3.12	4.12	3.97	1.73	0.77	3.10
IN	0.14	0.64	1.69	1.90	3.31	5.74	3.45	4.76	4.42	2.00	0.99	3.43

CAL YR 1971 TOTAL 4,311.89 MEAN 11.9 MAX 142 MIN 0.05 CFSM 1.49 IN 26.26
WTR YR 1972 TOTAL 6,855.00 MEAN 18.7 MAX 190 MIN 0.05 CFSM 2.36 IN 32.24

PEAK DISCHARGE (BASE: 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	0930	5.31	138				
6-19	1445	6.87	231				
9-20	0945	9.40	148				

TAUNTON RIVER BASIN

01107000 Dorchester Brook near Brockton, Mass.

LOCATION.--Lat 42°03'41", long 71°03'59", Plymouth County, on right bank 20 ft upstream from bridge on Pearl Street and 3 miles southwest of Brockton.

DRAINAGE AREA.--4.67 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 7.97 cfs (23.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 125 cfs Mar. 3 (gage height, 4.17 ft); minimum, 0.04 cfs Oct. 3, 4, 5, 6.
Period of record: Maximum discharge, 359 cfs Mar. 18, 1968 (gage height, 5.86 ft); no flow for part of Sept. 8, 9, 1964.

REMARKS.--Records good. Recording rain gage at station since April 1963 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.87	27	5.4	3.4	30	10	0.2	14	8.8	7.0	.26
2	.05	5.1	19	6.7	3.4	42	0.5	8.8	10	4.1	5.3	.22
3	.05	3.1	14	12	4.4	8.4	0.4	11	12	7.0	3.6	.8
4	.05	2.4	13	15	23	83	0.5	42	0.2	4.4	4.1	14
5	.05	2.0	8.7	21	17	44	0.2	45	8.8	4.1	2.7	17
6	.15	1.4	7.0	17	13	20	0.2	36	8.8	3.6	1.9	10
7	.24	3.4	4.4	13	10	24	8.8	24	0.9	3.3	1.0	7.8
8	.24	3.2	8.7	10	8.1	97	0.5	22	12	3.4	2.4	4.1
9	.19	2.2	10	0.5	6.7	48	7.8	17	12	3.6	2.6	3.9
10	1.4	1.4	11	13	6.1	32	7.3	45	24	3.1	1.6	2.7
11	2.4	1.7	7.0	14	5.4	22	7.3	36	24	3.3	1.2	1.9
12	.06	1.4	6.7	13	5.6	10	7.3	22	12	3.3	.74	1.6
13	.41	1.5	5.9	12	8.5	17	8.5	18	11	5.1	.65	1.3
14	.41	1.4	5.2	11	20	14	12	15	0.5	4.1	.70	1.5
15	.74	1.8	5.9	0.5	22	14	12	24	7.8	5.1	2.1	1.9
16	.38	1.5	7.0	7.5	17	24	11	41	7.8	4.4	1.8	1.0
17	.74	1.4	7.0	5.0	11	57	10	36	12	2.7	1.5	1.5
18	.30	1.4	6.7	5.1	0.2	43	0.5	25	10	4.3	1.4	1.3
19	.30	1.3	5.0	5.4	14	55	4.5	17	24	2.4	1.3	5.3
20	.24	1.3	5.6	5.0	20	33	14	17	37	2.4	.97	4.4
21	.24	1.1	5.4	6.4	20	24	24	23	20	2.7	.74	5.4
22	.24	1.4	5.4	7.0	18	34	21	22	24	2.7	.66	8.5
23	.24	3.1	5.3	7.3	14	41	32	18	12	2.4	.68	6.7
24	.21	3.1	5.4	6.7	11	74	34	14	14	2.4	.61	4.4
25	.54	4.1	6.4	6.7	10	25	33	11	23	2.1	.34	3.3
26	.77	13	7.0	6.7	10	10	24	0.9	17	2.4	.74	2.8
27	.41	14	7.0	5.4	11	14	14	0.8	12	2.4	.44	2.7
28	.38	17	7.0	5.1	13	13	14	7.0	11	2.1	.45	2.4
29	.74	15	5.0	4.7	10	11	12	7.3	11	1.8	.38	2.2
30	.74	20	4.8	4.1	-----	10	14	5.4	0.5	1.0	.74	2.1
31	.30	-----	5.6	5.0	-----	11	-----	4.4	-----	1.0	.32	-----
TOTAL	13.74	194.37	253.3	276.3	258.4	1,022	413.7	471.0	403.4	117.5	92.80	138.18
OFFER	.44	4.41	4.12	4.41	12.4	33.0	13.8	21.4	16.4	3.74	1.61	4.41
OFF	2.4	2.0	27	21	23	64	10	48	17	8.8	7.0	17
OFF	.05	.87	4.8	3.4	3.4	18	7.3	4.4	7.0	1.8	.32	.22
OFF	.04	.87	1.74	1.41	2.44	7.77	2.44	4.47	3.44	.41	.74	.98
OFF	.11	1.04	2.02	2.02	2.44	4.14	3.30	0.78	2.07	.06	.40	1.10

CAL. YR 1971 TOTAL 2,443.30 OFFER 7.68 OFF 40 OFFER 1.52 IN 20.44
 YR 1972 TOTAL 3,448.23 OFFER 10.8 OFFER 44 OFFER 1.05 OFFER 2.11 IN 31.44

PEAK DISCHARGE BASE. 55 CFS

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1000	4.17	125				
3-18	0115	3.76	89				
3-18	1315	3.30	43				

TAUNTON RIVER BASIN

85

01108000 Taunton River at State Farm, near Bridgewater, Mass.

LOCATION.--Lat 41°56'05", long 70°57'18", Plymouth County, on right bank at State Farm, 1 mile upstream from Sawmill Brook, 3.5 miles northwest of Middleboro, and 4 miles southeast of Bridgewater.

DRAINAGE AREA.--260 sq. mi.

PERIOD OF RECORD.--October 1929 to current year. Prior to October 1969, published as "at State Farm."

GAGE.--Water-stage recorder. Datum of gage is 9.61 ft above mean sea level. Prior to Oct. 1, 1931, inverted nonrecording gage at site 40 ft downstream with zero of gage at 10.02 ft on present gage. Oct. 1, 1931, to June 8, 1934, nonrecording gage, and June 9, 1934, to Oct. 12, 1939, water-stage recorder, at site 40 ft downstream at present datum.

AVERAGE DISCHARGE.--43 years, 478 cfs (24.97 inches per year), adjusted for diversions.

EXTREMES.--Current year: Maximum discharge, 2,450 cfs Mar. 19 (gage height, 8.77 ft); minimum, 38 cfs Oct. 5, 6; minimum daily, 39 cfs Oct. 5, 6. Period of record: Maximum discharge, 4,980 cfs Mar. 20, 1968 (gage height, 14.48 ft); minimum, 8 cfs Sept. 10, 1944; minimum daily, 9 cfs Sept. 9-12, 1944.

REMARKS.--Records good. Diversions to and from basin above station for municipal supplies: to the basin from Silver Lake for Brockton and other towns and from Great Sandy Bottom Pond for Abington; from the basin from ponds at head of Nemasket River for New Bedford, Taunton, and other towns. Flow regulated by reservoirs and small powerplants above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1934. WSP 1051: 1933. WSP 1201: 1931. WSP 1301: 1930(M), 1933(M), 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	54	960	316	158	944	866	588	487	645	316	81
2	41	100	757	310	167	1,100	781	563	562	604	374	81
3	40	108	604	507	177	1,450	772	544	504	554	318	236
4	40	153	481	504	674	2,110	757	1,060	468	515	315	946
5	39	114	371	675	826	2,270	744	1,550	487	471	275	1,100
6	39	102	302	642	669	2,030	712	1,520	494	444	217	966
7	43	108	334	553	537	1,040	699	1,230	476	398	194	786
8	42	117	387	482	430	1,450	668	1,060	584	364	201	542
9	43	107	405	398	362	1,580	643	1,030	639	364	184	431
10	61	97	366	514	250	1,480	623	1,420	764	324	173	397
11	200	41	322	589	256	1,260	587	1,630	937	301	140	370
12	152	37	294	573	225	1,100	592	1,500	771	298	129	361
13	130	82	270	538	238	1,300	582	1,290	690	285	113	334
14	41	77	245	509	502	932	743	1,120	632	348	111	260
15	40	74	249	459	606	944	743	1,080	565	300	171	248
16	79	83	295	379	605	1,200	748	1,320	499	254	184	224
17	71	74	306	289	551	1,010	677	1,300	512	217	141	206
18	66	76	287	245	470	2,270	661	1,220	635	223	144	182
19	62	64	255	231	677	2,420	618	1,120	732	164	134	240
20	59	68	236	238	1,360	2,200	653	1,040	1,190	135	120	686
21	59	77	250	253	1,330	1,860	959	1,190	1,250	149	110	656
22	55	107	261	271	1,100	1,010	1,000	1,190	1,110	182	105	706
23	55	136	231	278	842	1,820	958	1,080	1,140	158	102	666
24	54	125	225	247	675	1,920	1,170	988	1,220	167	98	568
25	52	241	318	296	558	1,750	1,140	881	1,100	149	94	450
26	55	661	341	242	464	1,540	1,040	770	955	168	90	361
27	55	560	327	238	476	1,340	919	676	354	164	86	320
28	63	525	315	210	542	1,180	834	616	781	141	90	302
29	69	526	298	187	715	1,050	755	577	708	151	90	294
30	65	863	204	176	-----	974	642	521	653	139	83	302
31	59	-----	319	163	-----	902	-----	479	-----	147	83	-----
TOTAL	2,070	5,752	10,899	11,597	16,506	46,976	23,288	32,153	22,419	8,923	5,005	13,302
MEAN	66.8	192	352	374	569	1,515	776	1,037	747	288	161	443
MAX	200	863	960	675	1,360	2,420	1,170	1,630	1,250	645	374	1,100
MIN	39	59	168	158	902	562	479	468	135	83	81	81
MEAN†	93.3	215	372	395	591	1,537	796	1,058	773	313	192	470
CFSM†	.36	.83	1.43	1.52	2.27	5.91	3.06	4.07	2.97	1.20	.74	1.81
IN.†	.41	.92	1.65	1.75	2.45	6.82	3.42	4.69	3.32	1.39	.85	2.02

CAL YR 1971 TOTAL 132,020 MEAN 362 MAX 2,160 MIN 39 MEAN† 385 CFSM† 1.48 IN† 20.09
WTR YR 1972 TOTAL 198,090 MEAN 543 MAX 2,420 MIN 39 MEAN† 567 CFSM† 2.18 IN† 29.69

† Adjusted for diversions to and from basin for municipal supplies of New Bedford, Taunton, Brockton, Abington, and other towns. Records of diversion furnished by municipalities.

TAUNTON RIVER BASIN

01108500 Wading River at West Mansfield, Mass.

LOCATION.--Lat 42°00'00", long 71°15'38", Bristol County, on right bank 200 ft downstream from Belcolm Street Bridge at West Mansfield, 2 miles upstream from Hodges Brook, and 3 miles southwest of Mansfield.

DRAINAGE AREA.--19.2 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 120.85 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 33.9 cfs (23.98 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 174 cfs Mar. 5 (gage height, 5.35 ft); minimum daily, 0.45 cfs Nov. 18.

Period of record: Maximum discharge, 541 cfs Mar. 19, 1968 (gage height, 6.60 ft); no flow Oct. 22-24, 1957 (caused by temporary storage upstream).

REMARKS.--Records good. Flow regulated by Lake Mirimichi and other lakes and reservoirs above station. Diversion above station for municipal supply of Attleboro (see table below for figures of diversion) and small diversions to and from basin for other municipal supplies.

REVISIONS (WATER YEARS).--WSP 1621: 1953-58 (monthly runoff). WRD Mass., N.H., R.I., Vt. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2	0.77	2.4	1.1	1.3	1.6	4.1	6.1	4.3	5.7	5.6	7.7	3.5
3	0.67	4.7	7.1	1.2	1.4	5.0	5.7	4.2	6.7	5.3	8.5	3.4
4	0.89	4.2	5.5	2.2	1.7	10.9	5.3	4.4	6.2	4.9	9.5	6.5
5	1.2	2.4	5.0	2.2	5.1	16.0	5.0	6.9	5.8	4.7	9.9	1.3
6		4.5		2.7	5.1	17.1	4.8	7.5	6.6	4.1	8.3	1.5
7	2.9	1.0	4.4	2.9	4.6	16.3	4.4	7.0	6.4	3.6	7.1	1.2
8	4.8	1.5	9.2	2.6	4.4	14.1	4.5	6.7	5.9	3.8	6.9	9.4
9	5.2	1.7	7.9	2.7	2.8	13.2	4.3	6.7	5.9	3.8	8.7	8.0
10	5.0	1.4	6.6	2.7	3.4	13.1	4.2	7.3	6.2	3.4	8.4	7.1
11	9.2	1.3	6.0	1.1	2.7	11.5	3.9	5.0	8.4	3.7	7.1	6.5
12												
13	0.0	1.3	5.8	2.2	2.4	10.5	3.9	9.0	9.0	3.4	6.0	5.5
14	6.0	1.2	5.3	2.2	2.4	9.6	4.0	8.7	7.6	2.8	5.0	4.8
15	9.0	1.1	4.5	2.2	2.8	8.9	4.1	7.9	6.4	2.5	4.4	4.4
16	4.4	1.0	4.4	2.1	4.6	8.1	4.8	7.1	5.7	2.8	4.3	4.7
17	2.4	0.95	5.2	2.9	4.6	8.4	4.6	8.8	5.4	3.2	8.2	5.3
18												
19	2.9	0.95	7.6	2.2	4.3	8.6	4.3	10.1	5.2	2.6	9.4	5.0
20	2.6	0.62	9.2	2.0	4.2	11.0	4.5	5.4	6.2	1.9	8.8	4.5
21	2.5	0.45	9.0	1.9	3.8	13.6	4.2	5.0	6.9	1.7	8.1	3.9
22	2.5	0.72	7.3	2.0	4.4	13.6	3.7	8.4	7.6	9.3	7.8	1.5
23	2.4	0.77	6.8	2.1	5.4	13.1	4.1	8.2	9.9	5.2	7.3	3.1
24												
25	2.4	0.72	7.1	2.7	4.8	12.3	5.3	5.4	11.0	1.2	6.6	3.4
26	2.4	0.67	7.3	2.6	4.0	11.9	5.0	9.0	10.3	1.2	5.8	2.9
27	2.3	0.62	6.4	2.5	3.4	12.9	6.0	7.7	10.5	1.2	5.2	2.5
28	2.5	0.57	8.4	2.4	3.2	12.9	6.7	7.0	10.4	1.1	5.3	2.1
29	3.6	1.1	1.3	2.4	3.0	12.4	6.6	6.4	9.6	1.1	4.9	1.7
30												
31	3.8	6.8	1.2	2.1	2.0	11.1	6.0	5.8	8.9	1.1	4.4	1.5
32	2.9	7.1	1.1	1.8	3.2	9.4	5.7	5.2	7.6	1.0	5.5	1.3
33	2.6	7.0	1.1	1.7	3.2	8.2	5.3	4.9	6.7	9.4	5.3	1.1
34	1.9	6.8	9.9	1.7	3.4	7.6	4.9	4.5	5.9	8.5	5.0	8.7
35	1.5	1.5	9.7	1.4	-----	7.1	4.5	4.0	5.6	8.0	4.3	8.3
36	1.2	-----	1.3	1.8	-----	6.6	-----	3.5	-----	7.7	3.7	-----
TOTAL	98.26	78.34	241.4	72.6	1,019	3,392	1,464	2,180	2,202	765.1	207.5	352.5
MEAN	3.17	2.61	7.79	23.4	35.8	109	48.8	70.3	73.4	24.7	6.69	11.8
MAX	9.2	1.5	1.3	3.2	5.4	17.1	6.7	10.1	11.0	5.6	9.9	3.4
MIN	0.67	0.45	4.4	1.2	1.4	4.1	3.7	3.5	5.2	5.2	3.7	3.4
(†)	3.42	2.41	3.11	2.51	2.27	2.38	2.38	2.44	2.47	2.64	2.74	2.51

CAL YR 1971 TOTAL 8,030.53 MEAN 22.0 MAX 112 MIN 0.12 MEAN† 24.9 CFSM† 1.30 INT 17.60
WTR YR 1972 TOTAL 12,746.10 MEAN 34.8 MAX 171 MIN 0.45 MEAN† 37.4 CFSM† 1.95 INT 26.55

† Diversion, in cubic feet per second, for municipal supply of Attleboro; records furnished by city of Attleboro.

‡ Adjusted for diversion.

TAUNTON RIVER BASIN

87

01109000 Wading River near Norton, Mass.

LOCATION.--Lat 41°56'51", long 71°10'38", Bristol County, on left bank 200 ft downstream from bridge on State Highway 140, 0.9 mile upstream from confluence with Rumford River, and 1.5 miles southeast of Norton.

DRAINAGE AREA.--42.4 sq mi.

PERIOD OF RECORD.--June 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 49.63 ft above mean sea level. Prior to May 5, 1933, nonrecording gage at same site (at datum 0.62 ft higher prior to Oct. 1, 1930, and at present datum thereafter).

AVERAGE DISCHARGE.--47 years, 71.7 cfs (22.96 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 517 cfs Mar. 3 (gage height, 9.17 ft); minimum, 1.9 cfs Oct. 2, 3, 4, 8, 9; minimum daily, 2.0 cfs Oct. 3.

Period of record: Maximum discharge, 1,460 cfs Mar. 19, 1968 (gage height, 11.47 ft); minimum, 0.3 cfs Sept. 10, 1926.

REMARKS.--Records good. Flow regulated to some extent by Lake Mirimichi and other lakes and reservoirs above station. Diversion above station for municipal supply of Attleboro (see table below for figures of diversion) and small diversions to and from basin for other municipal supplies.

REVISIONS (WATER YEARS).--WSP 871: 1938. WSP 1301: 1929-33(M). WSP 1621: 1925-58 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	8.6	73	46	30	118	136	97	115	104	43	12
2	2.1	16	56	48	35	163	128	96	142	95	36	11
3	2.0	20	41	67	37	360	101	96	134	86	32	38
4	2.3	14	34	76	102	426	96	174	117	86	36	60
5	2.6	13	29	94	111	345	94	199	114	75	28	44
6	2.7	10	26	85	105	330	94	172	126	64	23	36
7	2.6	10	38	77	92	299	90	151	124	62	21	32
8	2.1	11	46	66	74	290	84	141	133	59	31	28
9	2.4	11	42	60	74	307	87	145	135	60	27	25
10	14	9.9	37	42	64	261	94	201	144	55	23	20
11	28	9.5	34	87	56	224	42	202	105	55	20	19
12	20	9.2	31	84	50	202	62	176	168	52	18	16
13	12	4.1	25	73	58	190	64	159	141	53	17	15
14	9.5	6.1	25	75	93	176	104	144	125	55	16	16
15	7.4	4.1	27	75	114	176	104	144	117	54	32	19
16	5.5	6.1	33	63	104	191	102	214	104	52	34	18
17	5.5	7.6	35	55	94	208	100	205	116	45	30	14
18	6.1	7.4	33	48	80	454	96	174	137	28	26	15
19	5.5	7.4	29	47	101	354	96	163	177	28	23	54
20	5.5	6.7	27	48	120	293	165	151	231	24	21	143
21	5.5	7.6	29	54	120	266	143	145	266	22	20	120
22	4.9	10	28	56	115	253	136	149	244	25	14	108
23	5.5	11	25	54	97	245	166	165	234	27	16	95
24	6.4	9.5	27	58	97	224	174	144	232	27	16	79
25	8.1	28	36	58	76	255	142	129	265	26	15	67
26	12	43	34	52	76	230	145	119	174	26	14	55
27	12	37	39	46	75	204	131	107	143	24	14	53
28	9.9	44	45	43	74	178	120	101	135	22	19	46
29	9.2	44	44	38	92	162	112	94	124	24	18	40
30	7.4	76	43	39	-----	151	103	48	114	21	15	37
31	7.4	-----	44	37	-----	142	-----	41	-----	17	14	-----
TOTAL	229.4	520.4	1,128	1,404	2,430	7,944	3,351	4,656	4,728	1,477	718	1,337
MEAN	7.40	17.3	36.4	45.4	83.8	256	112	150	154	47.6	23.2	44.6
MAX	28	75	73	94	126	486	174	219	260	109	43	143
MIN	2.0	6.7	25	37	35	114	62	81	106	17	14	11
(†)	3.42	2.41	3.11	2.51	2.27	2.38	2.38	2.44	2.47	2.64	2.74	2.51

CAL YR 1971	TOTAL	14,663.4	MEAN	53.9	MAX	335	MIN	2.0	MEAN†	56.8	CFSM†	1.34	IN†	18.18
WTR YR 1972	TOTAL	39,420.0	MEAN	83.1	MAX	486	MIN	2.0	MEAN†	85.7	CFSM†	2.02	IN†	27.53

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	2400	9.17	517				
3-18	1400	8.98	478				
6-21	1800	7.91	303				

† Diversion, in cubic feet per second, for municipal supply of Attleboro; records furnished by city of Attleboro.
‡ Adjusted for diversion.

TAUNTON RIVER BASIN

01109060 Threemile River at North Dighton, Mass.

LOCATION.--Lat 41°51'58", long 71°07'24", Bristol County, on right bank 800 ft downstream from Warner Boulevard at North Dighton and 1.4 miles upstream from mouth.

DRAINAGE AREA.--83.8 sq mi.

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 160 cfs.

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Mar. 18 (gage height, 5.72 ft); minimum, 8.6 cfs Oct. 4, 5.

Period of record: Maximum discharge, 2,490 cfs Mar. 19, 1968 (gage height, 8.30 ft); minimum, 5.6 cfs Aug. 16, 17, 21, 22, 1966.

REMARKS.--Records good. Flow regulated by Lake Mirmichi and other lakes and reservoirs above station. Diversions to and from basin above station for municipal supplies may be compensating.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	22	123	94	77	218	291	202	200	225	114	30
2	11	26	100	93	81	266	276	195	253	205	107	28
3	13	35	76	109	85	485	255	197	270	181	81	98
4	9.3	36	61	121	163	865	225	361	253	165	75	144
5	9.3	32	51	150	177	928	212	458	239	153	73	113
6	13	27	45	158	167	775	212	447	233	140	54	84
7	14	29	57	143	170	669	212	379	244	129	45	73
8	13	27	66	133	131	635	205	333	258	118	48	64
9	9.7	25	64	111	135	648	190	317	282	111	51	60
10	27	23	60	147	131	627	183	393	320	107	44	56
11	67	23	57	152	115	537	174	494	435	102	38	50
12	40	22	53	154	103	463	170	443	435	96	34	47
13	31	21	53	145	113	420	174	386	357	99	33	46
14	25	20	54	137	152	390	207	340	297	123	32	52
15	21	19	55	131	167	392	215	364	255	114	64	59
16	19	20	64	115	182	415	217	439	230	104	73	54
17	17	21	69	93	167	567	212	494	210	114	62	49
18	15	20	69	103	131	906	197	462	205	66	52	46
19	15	20	64	93	212	1,020	188	404	326	73	48	113
20	15	20	61	90	283	823	202	375	530	82	43	255
21	16	20	61	97	230	679	258	412	642	90	38	288
22	15	25	66	100	257	622	294	443	646	37	35	250
23	15	27	63	102	215	686	326	404	614	58	33	197
24	16	26	63	103	207	693	368	343	562	64	32	159
25	17	54	73	105	175	630	375	297	494	70	29	134
26	20	88	75	103	161	558	343	258	416	78	30	116
27	24	72	73	91	156	494	304	233	354	59	37	104
28	23	70	77	83	161	427	270	210	294	60	36	132
29	22	76	78	83	189	371	241	193	267	56	36	132
30	23	131	85	84	-----	337	220	179	239	53	34	99
31	49	-----	96	81	-----	310	-----	168	-----	68	31	-----
TOTAL	581.0	1,077	2,112	3,498	4,693	17,854	7,218	10,583	10,394	3,182	1,542	3,071
MEAN	18.7	35.9	68.1	113	162	576	241	341	345	133	49.7	102
MAX	47	131	123	158	283	1,020	375	494	646	225	114	288
MIN	9.3	19	45	81	77	218	170	168	200	37	29	28

CAL FY 1971 TOTAL 43,452.1 MEAN 119 MAX 593 MIN 9.0

WTR FY 1972 TOTAL 65,765.0 MEAN 180 MAX 1,020 MIN 9.0

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	1615	5.56	940				
3-18	2330	5.72	1,060				
6-22	1300	4.88	662				

TAUNTON RIVER BASIN

89

01109070 Segreganset River near Dighton, Mass.

LOCATION.--Lat 41°50'25", long 71°08'36", Bristol County, on left bank 50 ft upstream from twin culverts on Center Street and 1.8 miles north-west of Dighton.

DRAINAGE AREA.--10.6 sq mi.

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 21.2 cfs (27.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 269 cfs Mar. 18 (gage height, 4.73 ft); minimum, 0.01 cfs Oct. 8-10.
Period of record: Maximum discharge, 867 cfs Mar. 18, 1968 (gage height, 7.51 ft); no flow Aug. 13-22, 1966, Oct. 2, 3, 1968, Sept. 5, 6, 1969.

REMARKS.--Records good. Occasional regulation by ponds above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.91	50	18	7.6	63	23	17	20	16	16	1.1
2	.07	1.5	30	18	7.4	73	22	16	40	15	27	1.1
3	.05	2.1	19	28	6.8	146	21	20	33	13	20	13
4	.02	1.7	14	32	48	191	20	142	22	11	13	43
5	.02	.20	11	41	50	109	22	141	21	9.1	8.1	30
6	.02	.27	9.1	28	33	69	23	68	21	7.7	6.2	19
7	.02	.83	17	29	23	54	21	44	20	5.2	4.9	11
8	.02	1.2	20	21	18	64	20	35	25	3.8	4.2	7.7
9	.01	.91	19	17	15	86	19	40	31	4.9	4.0	4.9
10	.37	.69	16	32	14	63	18	86	38	4.4	3.5	4.7
11	3.6	.54	14	37	12	44	17	70	43	3.8	2.2	5.2
12	2.9	.54	9.8	32	11	38	18	45	31	3.5	2.1	3.5
13	1.5	.47	4.9	26	15	38	22	34	22	4.2	2.1	3.3
14	.98	.54	8.4	25	36	36	39	28	17	10	2.0	4.7
15	.76	.44	11	21	41	40	40	45	14	13	2.7	6.2
16	.62	2.5	14	17	35	69	29	72	12	10	3.5	7.4
17	.54	.69	14	12	27	158	26	55	18	7.4	3.6	6.5
18	.47	.47	13	10	22	243	23	39	27	5.7	3.5	5.7
19	.40	.40	10	11	50	123	20	28	69	4.7	2.9	33
20	.40	.40	9.5	11	107	69	29	31	148	4.4	2.4	133
21	.40	.54	11	15	81	51	58	57	122	4.2	2.1	101
22	.40	1.6	11	16	52	52	50	53	65	4.0	1.7	50
23	.37	2.4	9.5	16	35	94	60	36	63	3.6	1.7	42
24	.37	2.0	10	16	28	75	71	27	64	3.1	1.5	27
25	.44	12	16	16	25	53	54	21	44	3.3	1.3	21
26	.91	23	17	14	23	41	39	18	32	6.7	1.2	16
27	.98	17	16	11	25	35	30	15	21	7.4	1.2	14
28	.83	17	15	9.1	24	30	25	13	20	6.7	1.2	11
29	.69	17	13	9.1	44	27	22	12	17	4.9	1.5	8.8
30	.69	49	13	8.4	-----	25	19	11	14	4.2	1.6	9.5
31	.62	-----	18	8.8	-----	23	-----	10	-----	4.7	1.2	-----
TOTAL	19.56	158.84	463.2	615.4	917.8	2,282	900	1,329	1,134	209.6	150.1	646.3
MEAN	.63	5.29	14.9	19.9	31.6	73.6	30.0	42.9	37.8	6.76	4.84	21.5
MAX	3.6	49	50	41	107	243	71	142	148	16	27	133
MIN	.01	.20	4.9	9.4	7.4	23	17	10	12	3.1	1.2	1.1
CFSM	.06	.50	1.41	1.82	2.98	6.94	2.83	4.05	3.57	.64	.46	2.03
IN.	.07	.56	1.63	2.16	3.22	8.01	3.16	4.66	3.98	.74	.53	2.27

CAL YR 1971 TOTAL 6,082.42 MEAN 16.7 MAX 255 MIN .01 CFSM 1.58 IN 21.35
WTR YR 1972 TOTAL 8,825.80 MEAN 24.1 MAX 243 MIN .01 CFSM 2.27 IN 30.97

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	0330	4.44	222	6-20	1100	4.31	203
3-18	0515	4.73	269	9-20	1130	4.21	177
5-4	2115	4.19	186				

PALMER RIVER BASIN

01109200 West Branch Palmer River near Rahoboth, Mass.

LOCATION.--Lat 41°52'46", long 71°15'18", Bristol County, on left bank 20 ft downstream from culvert on Homestead Avenue and 2.6 miles north of Rahoboth.

DRAINAGE AREA.--4.96 sq mi.

PERIOD OF RECORD.--October 1962 to current year. Prior to October 1970, published as Bliss Brook near Rahoboth.

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 7.71 cfs (21.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 151 cfs Mar. 3 (gage height, 4.57 ft); minimum, 0.06 cfs Oct. 3-6, Sept. 2. Period of record: Maximum discharge, 441 cfs Mar. 18, 1968 (gage height, 5.43 ft); no flow at times in water years 1964, 1965, 1966, 1970, 1971.

REMARKS.--Records good. Recording rain gage at station since April 1963 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.08	17	5.3	2.7	29	8.9	7.7	23	7.7	21	.14
2	.07	1.4	10	6.1	2.5	28	8.2	7.7	21	6.6	11	.11
3	.07	1.7	7.3	13	3.2	56	7.7	8.4	12	5.3	6.4	8.9
4	.06	1.7	6.4	11	30	50	7.5	51	8.7	4.4	5.7	17
5	.06	1.4	5.1	20	16	50	8.4	43	9.7	4.4	4.2	6.6
6	.07	1.1	4.3	13	10	36	8.2	28	8.4	3.6	2.8	4.2
7	.10	1.1	8.5	9.1	7.5	25	7.7	18	7.2	3.1	2.4	3.1
8	.08	1.2	8.8	7.3	6.4	42	7.0	15	7.2	2.8	4.1	2.6
9	.08	1.2	7.3	6.4	5.7	44	7.0	19	9.2	2.6	2.6	2.2
10	.94	1.1	6.6	15	5.1	27	6.6	40	18	2.2	2.0	2.4
11	3.4	1.1	5.6	13	4.5	20	6.2	27	16	2.0	1.5	1.9
12	1.5	1.1	5.1	11	2.9	18	6.4	19	10	2.3	1.2	1.5
13	.71	1.1	4.7	9.4	5.7	20	8.2	14	8.0	2.9	.53	1.4
14	.61	1.0	4.3	8.8	15	17	16	11	7.0	6.2	.86	2.4
15	.52	.88	4.7	6.8	12	16	12	27	6.2	4.2	2.9	3.9
16	.48	.94	6.4	5.3	11	29	10	35	5.3	3.2	2.6	2.8
17	.42	.94	5.5	3.5	8.5	72	9.4	24	9.9	2.7	1.7	2.2
18	.33	.94	4.7	3.4	7.3	87	8.7	17	12	2.2	1.5	1.8
19	.33	.94	3.9	3.9	14	49	7.7	13	43	1.6	1.3	26
20	.33	.94	3.7	4.1	32	32	14	17	58	2.2	.53	65
21	.33	1.0	4.1	5.1	19	23	27	36	38	2.2	.67	34
22	.31	1.2	4.1	4.9	15	28	18	23	24	1.7	.50	27
23	.26	1.4	3.2	5.1	11	47	35	15	41	1.3	.41	19
24	.28	1.3	3.7	5.3	9.5	32	32	11	46	1.1	.37	13
25	.56	5.9	5.7	5.5	7.5	24	22	9.4	25	1.5	.33	10
26	1.1	9.4	5.1	4.9	7.3	18	16	8.0	16	3.7	.27	8.4
27	.94	4.9	4.9	3.9	7.8	14	13	7.0	12	2.3	.27	7.2
28	.82	8.4	4.9	3.5	8.3	12	10	6.4	9.4	1.6	.37	5.7
29	.71	5.9	4.3	3.4	16	11	9.2	5.1	8.0	1.3	.33	5.1
30	.61	30	4.1	3.2	-----	9.7	8.2	4.7	7.2	.53	.24	5.1
31	.56	-----	6.6	3.0	-----	9.2	-----	4.4	-----	.73	.17	-----
TOTAL	16.71	90.36	180.9	223.2	303.4	1,064.9	366.2	571.8	526.4	91.36	81.85	290.65
MEAN	.54	3.00	5.84	7.20	10.5	34.4	12.2	18.4	17.5	2.95	2.64	9.69
MAX	3.4	30	17	20	32	96	35	51	58	7.7	21	65
MIN	.06	.08	3.2	3.0	2.5	9.2	6.2	4.4	5.3	.73	.17	.11
CFSM	.11	.60	1.18	1.45	2.12	6.94	2.46	3.71	3.53	.59	.53	1.95
IN.	.13	.68	1.36	1.67	2.28	7.99	2.75	4.29	3.95	.69	.61	2.18

CAL YR 1971 TOTAL 2,229.11 MEAN 6.11 MAX 98 MIN .01 CFSM 1.23 IN 16.72
 WTR YR 1972 TOTAL 3,807.43 MEAN 10.4 MAX 96 MIN .06 CFSM 2.10 IN 28.56

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1545	4.57	151				
3-17	2045	4.34	115				
9-20	0200	3.98	83				

BLACKSTONE RIVER BASIN

91

01109500 Kettle Brook at Worcester, Mass.

LOCATION.--Lat 42°13'55", long 71°50'07", Worcester County, on right bank 75 ft downstream from Webster Street Bridge at Worcester, 1 mile upstream from Beaver Brook.

DRAINAGE AREA.--31.3 sq mi.

PERIOD OF RECORD.--August 1923 to current year. Prior to October 1950, published as Blackstone River at Worcester. Adjusted monthly discharge, in cubic feet per second per square mile, and runoff, in inches, published in water-supply papers for 1923-58, may be subject to error because of regulation upstream.

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1937. Datum of gage is 472.86 ft above mean sea level, datum of 1929.

AVERAGE DISCHARGE.--49 years, 52.6 cfs (22.82 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum daily discharge, 640 cfs Mar. 18; minimum discharge, 6.4 cfs Oct. 3, 4.

Period of record: Maximum discharge, 3,970 cfs Aug. 19, 1955 (gage height, 12.78 ft, from floodmark), from rating curve extended above 1,700 cfs on basis of computation of peak flow over dam; maximum daily, 2,720 cfs Aug. 19, 1955; minimum discharge, 0.2 cfs May 17, 1940.

REMARKS.--Records excellent except those for periods of bypass flow through diversion tunnel, which are fair. City of Worcester diverts flow for municipal use from about 7.0 sq mi of drainage area above station; see table below for figures of diversion. Since October 1959, city diverts flow through tunnel, usually during periods of high flow; this flow included in daily discharge. Flow regulated by reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1301: 1927(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	88	41	38	57	130	43	176	85	32	12
2	9.5	32	57	50	30	86	125	62	178	76	27	12
3	9.2	29	42	90	50	340	120	41	137	68	26	49
4	8.6	25	36	70	120	400	130	207	115	47	27	47
5	11	21	32	75	92	250	104	194	270	46	24	26
6	20	20	32	66	98	200	88	176	200	72	24	21
7	23	24	77	46	83	160	43	144	145	62	24	18
8	16	24	77	50	42	250	76	124	114	54	34	17
9	15	22	62	90	33	250	69	153	112	65	30	21
10	42	20	57	120	30	200	46	176	101	57	28	21
11	76	19	72	110	28	150	66	147	103	49	24	17
12	39	18	79	100	27	130	69	119	151	41	23	15
13	27	17	65	90	57	150	76	101	112	42	22	16
14	23	16	53	90	173	140	110	85	88	48	28	22
15	21	16	56	80	117	130	94	133	74	48	60	25
16	10	20	48	70	88	130	88	173	66	35	34	20
17	17	19	68	60	65	250	124	149	41	33	27	18
18	17	18	50	57	52	640	130	119	80	31	25	15
19	15	17	40	46	40	440	103	97	84	51	23	42
20	13	17	44	55	60	240	117	97	105	114	21	35
21	12	17	43	45	48	200	146	149	105	74	19	25
22	11	21	41	48	44	320	137	133	115	53	18	23
23	9.4	19	35	50	38	600	166	101	140	44	17	19
24	9.5	17	45	60	40	300	181	81	137	40	17	17
25	22	23	66	70	37	240	156	86	112	45	17	17
26	17	23	54	60	30	200	121	59	97	69	17	17
27	14	21	47	50	39	180	99	52	96	36	21	21
28	13	34	44	45	38	140	86	47	72	31	20	16
29	12	39	42	40	41	150	76	43	62	26	14	15
30	11	108	43	39	-----	140	68	44	69	30	14	18
31	10	-----	43	39	-----	130	-----	57	-----	30	13	-----
TOTAL	582.6	728	1,676	2,040	1,697	7,268	3,228	3,432	1,681	1,666	752	657
MEAN	18.8	24.3	54.1	65.8	58.5	234	108	111	123	53.7	24.3	21.9
MAX	76	108	88	120	173	640	181	207	270	114	60	49
MTN	8.6	12	32	30	27	57	66	43	42	28	13	12
(†)	7.97	6.57	7.17	8.00	8.54	8.77	9.10	9.98	10.1	9.38	10.2	9.04

CAL YR 1971 TOTAL 14,609.4 MEAN 40.8 MAX 181 MTN 8.6 MEAN† 46.6 CFSM† 1.49 IN† 20.22
WTR YR 1972 TOTAL 27,407.6 MEAN 74.9 MAX 640 MTN 8.6 MEAN† 83.6 CFSM† 2.67 IN† 36.37

† Diversion, in cubic feet per second, for municipal supply of Worcester; records furnished by city of Worcester.

‡ Adjusted for diversion.

NOTE.--Bypass flow through diversion tunnel Dec. 27 to Feb. 7, Mar. 3 to Apr. 4, June 4-7, 21-23.

BLACKSTONE RIVER BASIN

01110000 Quinsigamond River at North Grafton, Mass.

LOCATION.--Lat 42°13'49", long 71°42'41", Worcester County, on right bank 800 ft downstream from dam at outlet of Hovey Pond at North Grafton and 0.3 mile upstream from Bummett Brook.

DRAINAGE AREA.--25.5 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 335 ft (from topographic map). Prior to Dec. 7, 1939, staff gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 40.8 cfs (21.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 304 cfs Mar. 23 (gage height, 3.34 ft); minimum daily, 2.5 cfs Oct. 5.
Period of record: Maximum discharge, 820 cfs Aug. 20, 1955 (gage height, 5.15 ft); no flow Aug. 6-9, 22, 1966, caused by unusual regulation.

REMARKS.--Records good. Some regulation by Lake Quinsigamond 2.3 miles upstream and by ponds above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	8.1	61	37	36	52	101	55	116	68	22	5.9
2	4.5	16	54	37	35	65	96	55	115	61	26	5.6
3	4.2	19	48	46	40	170	94	64	109	61	19	17
4	3.1	19	43	44	68	229	89	129	96	76	18	30
5	2.5	17	37	48	74	197	92	144	140	65	17	24
6	4.3	15	34	46	64	156	94	134	148	59	15	20
7	7.3	17	45	43	56	120	89	116	128	54	14	17
8	6.1	18	46	40	50	132	85	86	116	50	20	15
9	4.5	15	43	38	46	143	97	105	104	55	19	18
10	21	13	40	55	44	125	74	143	141	50	18	24
11	48	13	47	58	42	109	71	115	134	47	15	18
12	45	11	45	60	40	99	74	105	128	44	12	15
13	33	11	46	60	57	96	71	94	104	43	12	13
14	27	9.2	41	61	139	94	85	78	103	45	14	15
15	24	7.2	43	59	128	100	79	99	91	47	22	17
16	21	8.4	46	54	108	94	71	108	84	42	19	16
17	19	7.9	45	46	89	137	74	88	84	38	17	14
18	17	7.5	44	42	77	224	65	95	80	35	16	13
19	14	7.6	40	42	83	264	63	94	80	34	15	21
20	11	9.0	37	41	83	233	72	99	96	43	14	26
21	10	8.9	36	42	63	184	92	104	84	39	12	22
22	9.4	13	35	41	58	185	86	89	76	34	11	21
23	8.9	13	32	40	49	271	106	83	92	34	9.8	17
24	8.5	11	34	43	49	268	119	78	100	33	9.3	16
25	13	17	48	46	47	217	97	77	89	34	8.9	14
26	14	20	52	47	50	180	99	71	84	40	8.6	13
27	12	17	44	45	49	149	99	60	78	34	9.3	15
28	11	23	42	42	47	135	80	50	67	31	11	13
29	11	26	38	40	48	120	64	46	54	27	9.8	11
30	10	54	37	38	-----	112	56	44	54	23	8.2	11
31	9.3	-----	40	37	-----	108	-----	51	-----	21	7.3	-----
TOTAL	438.6	451.8	1,327	1,418	1,817	4,768	2,534	2,759	2,976	1,369	443.2	497.3
MEAN	14.1	15.1	42.8	45.7	62.7	154	84.5	89.0	99.2	44.2	14.3	16.6
MAX	48	54	61	61	139	271	119	144	148	76	22	30
MIN	2.5	7.2	32	37	35	52	56	44	54	21	7.3	5.6
CFSM	.55	.39	1.68	1.79	2.46	6.04	3.31	3.49	3.89	1.73	.56	.65
IN.	.64	.66	1.94	2.07	2.65	6.96	3.70	4.07	4.34	2.00	.65	.73

CAL YR 1971 TOTAL 11,614.1 MEAN 31.8 MAX 132 MIN 1.1 CFSM 1.21 IN 16.94
WTR YR 1972 TOTAL 20,799.1 MEAN 56.8 MAX 271 MIN 2.5 CFSM 2.23 IN 30.34

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

BLACKSTONE RIVER BASIN

93

01110500 Blackstone River at Northbridge, Mass.

LOCATION.--Lat 42°09'13", long 71°39'09", Worcester County, on left bank at Northbridge, 100 ft downstream from Sutton Street Bridge, 800 ft downstream from site of Paul Whitin Co. dam, and 3 miles downstream from Quinsigamond River.

DRAINAGE AREA.--139 sq mi.

PERIOD OF RECORD.--October 1939 to current year. October and November 1939 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Altitude of gage is 260 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 240 cfs (23.45 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 2,820 cfs Mar. 23 (gage height, 8.28 ft); minimum daily, 74 cfs Oct. 3, 4.

Period of record: Maximum discharge, 16,900 cfs Aug. 20, 1955 (gage height, 16.74 ft), from rating curve extended above 3,800 cfs on basis of computation of flow over dam at gage height 13.7 ft and slope-area measurement at gage height 16.74 ft; maximum gage height, 17.53 ft Aug. 20, 1955 (backwater from debris); minimum daily discharge, 2 cfs Aug. 29, 1941, Sept. 5, 1942, Aug. 28, 1957.

Stage and discharge of flood of Aug. 20, 1955, are the greatest since at least 1900. Flood of Mar. 19, 1936, reached a stage of 13.7 ft, from floodmarks (discharge, 7,510 cfs, by computation of flow over dam 800 ft above station).

REMARKS.--Records good. Flow regulated by mills and reservoirs above station. Daily discharge includes flow diverted from Nashua River basin and, at times since January 1966, from Quabbin Reservoir to Blackstone River basin for municipal supply of Worcester. No diversion from Quabbin Reservoir during year.

REVISIONS (WATER YEARS).--WSP 1301: 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	83	504	223	189	342	594	331	1,100	411	169	100
2	86	181	350	221	186	504	585	293	843	343	147	101
3	74	145	264	405	188	1,520	571	388	656	319	141	252
4	74	136	216	336	592	2,010	551	1,420	497	493	141	252
5	89	117	185	351	555	1,280	569	1,100	1,360	370	126	176
6	93	113	172	323	416	958	505	833	927	338	122	145
7	118	134	346	287	350	745	478	674	678	309	129	134
8	98	137	161	259	305	1,130	444	651	610	279	207	121
9	77	130	302	236	268	1,100	402	848	643	384	167	139
10	253	133	276	526	241	841	398	867	1,130	282	160	159
11	381	124	318	520	218	676	387	754	938	263	134	122
12	201	126	338	487	201	620	380	705	742	232	121	114
13	156	123	314	422	248	644	440	637	618	240	111	111
14	129	104	267	423	538	636	565	559	537	276	116	131
15	146	109	275	378	751	612	491	830	487	230	345	167
16	103	127	315	303	585	596	432	842	432	211	176	147
17	91	121	307	281	426	1,340	565	706	542	203	145	134
18	95	110	277	261	347	2,350	533	607	473	205	139	134
19	94	96	237	278	317	1,800	460	566	523	233	128	247
20	106	99	217	243	318	1,320	579	592	692	563	110	261
21	123	100	216	212	338	981	656	799	597	307	111	206
22	129	112	217	221	268	1,230	562	700	694	249	115	201
23	102	118	203	223	244	2,400	779	552	767	226	106	163
24	80	107	233	283	241	1,740	822	438	677	220	108	143
25	144	116	352	318	235	1,280	697	346	537	276	108	138
26	109	128	283	279	233	1,010	574	377	513	295	105	145
27	104	123	265	242	233	851	514	319	472	214	113	159
28	98	171	249	222	235	737	462	281	389	198	136	143
29	91	197	246	211	261	687	433	253	354	175	109	136
30	84	583	237	200	-----	657	376	258	444	163	107	136
31	78	-----	244	193	-----	608	-----	278	-----	146	104	-----
TOTAL	3,688	4,199	8,586	9,367	9,927	33,225	15,804	18,854	19,832	8,633	4,256	4,717
MEAN	119	140	277	302	342	1,072	527	608	661	278	137	157
MAX	381	583	504	526	938	2,400	822	1,410	1,360	563	345	261
MIN	74	83	172	193	186	342	376	253	354	146	104	106
MEAN†	89.5	114	265	287	327	1,071	523	594	650	268	114	131
CFSM†	.64	.82	1.91	2.06	2.35	7.71	3.76	4.27	4.68	1.93	.82	.94
IN.†	.74	.92	2.20	2.38	2.54	8.88	4.20	4.93	5.22	2.22	.94	1.05

CAL YR 1971 TOTAL 84,454 MEAN 231 MAX 1,190 MIN 52 MEAN† 211 CFSM† 1.52 IN† 20.63
 MTR YR 1972 TOTAL 141,088 MEAN 385 MAX 2,400 MIN 74 MEAN† 370 CFSM† 2.66 IN† 36.23

† Adjusted for diversion from Nashua River basin to Blackstone River basin for municipal supply of Worcester. Records of diversion furnished by city of Worcester.

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

BLACKSTONE RIVER BASIN

01111200 West River below West Hill Dam, near Uxbridge, Mass.

LOCATION.--Lat 42°06'17", long 71°36'28", Worcester County, on right bank 250 ft downstream from West Hill Dam, 2.2 miles northeast of Uxbridge, and 3.5 miles upstream from mouth.

DRAINAGE AREA.--27.9 sq mi.

PERIOD OF RECORD.--March 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 240 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 40.9 cfs (19.91 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 352 cfs Mar. 29 (gage height, 3.37 ft); minimum, 2.6 cfs Oct. 10; minimum daily, 2.7 cfs Oct. 2-9. Period of record: Maximum discharge, about 370 cfs Mar. 26, 1968 (gage height, about 3.45 ft); no flow for part of Aug. 17, 1967 (caused by unusual regulation); minimum daily discharge, 1.1 cfs Sept. 12, 1963, Aug. 12, 1965.

REMARKS.--Records good except those for period of doubtful or no gage-height record, which are fair. Flow regulated by West Hill Reservoir (usable capacity, 542,000,000 cu ft). See table below for figures of monthend contents.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.0	56	32	28	52	193	70	100	70	14	4.3
2	2.7	10	53	30	28	71	137	63	142	41	14	4.0
3	2.7	16	45	38	27	43	108	65	149	73	14	10
4	2.7	15	36	44	60	48	98	152	117	63	12	21
5	2.7	12	27	49	68	173	95	205	117	58	11	10
6	2.7	10	22	45	45	220	93	225	147	57	10	12
7	2.7	9.1	28	45	74	255	84	144	137	50	10	4.5
8	2.7	11	34	40	49	230	72	152	131	44	11	7.4
9	2.7	11	35	34	48	195	74	143	133	40	13	7.4
10	6.3	9.4	35	48	46	251	73	171	145	36	12	4.0
11	10	4.4	37	65	36	239	67	142	144	33	11	4.2
12	17	4.5	41	70	33	229	64	146	143	30	10	7.4
13	12	7.3	44	76	37	231	65	139	149	29	4.0	7.3
14	8.8	6.0	44	74	38	249	81	115	117	32	4.0	7.4
15	7.5	6.0	41	73	143	221	95	115	95	30	14	7.4
16	6.0	6.4	41	59	137	147	89	152	81	26	18	7.4
17	6.3	6.0	42	46	100	112	86	156	78	23	14	7.4
18	6.0	6.4	42	38	74	174	91	130	41	21	12	7.4
19	5.3	6.0	36	37	40	141	86	117	64	20	11	10
20	4.0	6.5	32	38	67	229	84	104	127	33	10	14
21	4.6	5.5	29	37	63	311	112	117	154	37	4.0	10
22	4.4	7.0	27	37	55	242	123	125	147	29	4.4	14
23	4.4	8.8	24	37	45	30	125	113	133	24	4.0	14
24	4.6	8.5	25	41	44	191	152	97	141	23	7.4	12
25	6.0	6.8	34	51	44	304	154	79	141	23	7.4	11
26	7.5	12	38	56	43	244	135	67	129	25	4.0	10
27	7.4	13	34	49	42	311	112	61	115	23	4.0	4.4
28	7.0	14	38	42	42	337	95	56	100	20	4.5	4.1
29	6.0	20	37	30	44	342	84	44	42	18	4.0	7.4
30	5.5	30	35	34	-----	202	74	43	71	18	7.2	7.3
31	5.3	-----	33	31	-----	234	-----	41	-----	14	4.7	-----
TOTAL	146.9	319.0	1,136	1,444	1,787	4,373	3,013	3,645	3,755	1,100	327.8	309.4
MEAN	4.03	10.6	36.5	46.6	61.5	204	100	114	125	35.4	10.6	10.3
MAX	14	30	56	76	143	342	193	205	144	41	18	21
MIN	2.7	5.0	22	30	27	30	65	41	71	14	4.7	4.0
(†)	.9	2.6	2.6	2.2	2.8	39.2	4.8	2.8	5.1	1.5	1.1	1.1
MEAN‡	6.06	11.3	36.5	46.4	61.9	219	87.2	117	126	34.1	10.4	10.3
CFSM‡	.22	.41	1.31	1.66	2.22	7.85	3.13	4.19	4.52	1.22	.37	.37
IN-1	.25	.45	1.51	1.92	2.39	9.06	3.49	4.83	5.04	1.41	.43	.41

CAL YR 1971 TOTAL 11,201.3 MEAN 34.9 MAX 202 MIN 1.0 MEAN‡ 38.9 CFSM‡ 1.39 IN‡ 10.94
 WTR YR 1972 TOTAL 23,390.2 MEAN 43.6 MAX 342 MIN 0.7 MEAN‡ 63.9 CFSM‡ 2.29 IN‡ 31.19

† Monthend contents, in millions of cubic feet, in West Hill Reservoir.

‡ Adjusted for change in contents in West Hill Reservoir.

NOTE.--Doubtful or no gage-height record July 13 to Sept. 13.

BLACKSTONE RIVER BASIN

95

01111300 Nipmuc River near Harrisville, R.I.

LOCATION.--Lat 41°58'52", long 71°41'11", Providence County, on left bank 1 mile upstream from mouth and 1.2 miles northwest of Harrisville.

DRAINAGE AREA.--16.0 sq mi.

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 340 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 25.3 cfs (21.47 inches per year).

EXTREMES.--Current year: Maximum discharge, about 550 cfs Mar. 3 (gage height, 6.82 ft, affected by backwater from ice); minimum, 0.58 cfs Sept. 2-10.

Period of record: Maximum discharge, 1,020 cfs Mar. 18, 1968 (gage height, 7.42 ft), from rating curve extended above 530 cfs; minimum, 0.09 cfs Sept. 10, 1964.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	JET	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	3.1	53	23	22	36	49	35	211	47	11	1.9
2	.65	15	30	25	20	43	46	37	114	36	9.8	1.8
3	.58	16	23	51	22	320	45	61	62	27	7.7	21
4	.58	14	18	42	90	250	43	253	45	24	7.1	26
5	.58	9.4	17	57	56	150	46	130	52	22	6.1	13
6	.58	6.7	15	50	46	125	46	82	46	22	5.1	7.4
7	.58	6.1	41	40	42	100	42	62	41	20	4.7	5.3
8	.58	6.7	49	34	38	140	38	57	40	20	9.4	4.2
9	.58	6.1	35	29	35	150	37	81	44	22	8.2	4.0
10	11	5.0	33	86	32	105	34	123	143	17	6.0	4.8
11	18	4.4	34	71	30	75	33	76	84	15	4.6	3.8
12	8.9	3.4	32	58	28	64	35	58	51	13	4.0	3.2
13	4.6	3.4	28	48	45	64	39	51	41	16	3.7	2.8
14	3.1	3.1	24	53	85	62	58	46	36	26	3.8	3.7
15	2.5	2.8	25	43	62	57	43	111	33	17	7.4	6.6
16	2.3	2.4	36	34	52	65	38	104	30	13	6.4	5.5
17	2.3	3.4	32	32	47	188	42	69	62	11	5.0	4.3
18	2.3	3.4	26	30	43	319	38	55	52	9.2	4.4	3.4
19	2.3	3.4	21	28	49	184	33	48	105	13	3.9	13
20	2.3	3.4	19	27	54	128	73	59	92	45	3.2	31
21	2.3	3.4	19	29	46	102	97	94	57	27	2.7	17
22	2.3	4.2	19	30	42	156	59	61	58	18	2.4	15
23	2.3	4.6	18	29	38	286	125	46	95	13	2.1	12
24	2.8	4.6	21	33	35	157	106	39	74	11	2.5	8.6
25	9.4	7.8	37	37	33	113	71	35	51	19	4.2	7.4
26	8.3	10	31	34	34	91	56	33	44	40	3.4	6.3
27	5.6	8.3	27	27	34	76	48	30	43	21	4.0	5.8
28	4.6	20	26	25	33	65	44	28	37	14	5.3	4.8
29	3.8	26	25	23	32	60	40	25	31	11	3.8	4.5
30	3.4	93	23	25	-----	56	37	24	36	8.7	2.8	4.6
31	3.1	-----	24	23	-----	52	-----	30	-----	7.6	2.3	-----
TOTAL	113.02	354.1	860	1,176	1,225	3,839	1,541	2,043	1,910	625.5	157.0	252.7
MEAN	3.65	10.1	27.7	37.9	42.2	124	51.4	65.9	63.7	20.2	5.06	8.42
MAX	18	93	53	46	90	320	125	253	211	47	11	31
MIN	.58	2.4	15	23	20	36	33	24	30	7.6	2.1	1.8
CFSM	.23	.63	1.73	2.37	2.64	7.75	3.21	4.12	3.98	1.26	.32	.53
IN.	.26	.71	2.00	2.73	2.85	8.93	3.58	4.75	4.44	1.45	.37	.59

CAL YR 1971 TOTAL 8,158.55 MEAN 22.4 MAX 167 MIN .51 CFSM 1.40 IN 18.97
 WTA YR 1972 TOTAL 14,046.32 MEAN 38.4 MAX 320 MIN .58 CFSM 2.40 IN 32.66

PEAK DISCHARGE (BASE, 270 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1615	6.82	550	3-23	0130	5.86	385
3-18	0130	5.92	400	5-4	0600	5.49	305

† About

BLACKSTONE RIVER BASIN

01111400 Chepachet River at Chepachet, R.I.

LOCATION.--Lat 41°55'22", long 71°39'29", Providence County, on right bank 10 ft downstream from Mower Pond Outlet, 450 ft downstream from old gristmill dam, and 0.9 mile northeast of Chepachet.

DRAINAGE AREA.--17.4 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 355 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 31.4 cfs (24.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 384 cfs Mar. 3 (gage height, 7.21 ft); minimum, 3.0 cfs Oct. 6.
Period of record: Maximum discharge, 1,080 cfs Mar. 18, 1968 (gage height, 8.85 ft), from rating curve extended above 380 cfs on basis of computation of peak flow over dam 450 ft upstream; minimum, 1.9 cfs Aug. 31, Sept. 1, 1965.

REMARKS.--Records good. Occasional regulation by ponds above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.9	6.8	41	24	45	60	36	115	39	41	10
2	3.4	3.8	5.5	43	23	57	58	35	126	35	35	9.1
3	3.2	3.0	4.7	59	25	296	54	41	93	33	30	33
4	3.2	3.5	4.2	55	102	268	52	118	65	35	31	37
5	3.2	2.8	3.2	65	62	209	54	138	55	32	26	28
6	6.5	2.4	2.5	59	50	162	53	109	48	30	24	25
7	13	2.4	4.1	52	47	125	51	80	45	24	23	23
8	9.9	2.4	4.1	47	44	152	68	65	42	25	29	20
9	8.3	2.1	3.4	43	40	167	47	68	42	31	25	20
10	3.4	1.8	2.9	62	37	135	41	105	129	25	21	19
11	42	17	2.8	64	35	110	29	88	125	21	20	17
12	25	15	2.4	62	32	91	34	70	88	21	18	16
13	19	15	2.2	57	55	78	42	59	84	29	16	15
14	27	13	1.7	69	87	59	58	51	53	47	15	17
15	28	13	1.9	61	64	69	55	106	46	37	17	19
16	33	13	2.5	51	59	73	51	137	39	34	17	17
17	20	13	2.1	43	52	162	49	111	61	30	16	15
18	25	15	1.5	40	48	258	38	94	64	28	15	14
19	22	14	1.3	39	54	221	31	62	110	35	14	19
20	19	21	1.3	37	58	172	49	61	133	31	13	39
21	17	23	1.2	39	51	138	77	95	100	24	12	27
22	15	24	1.3	37	47	144	65	82	93	20	11	30
23	14	26	1.2	36	47	209	111	65	129	18	10	25
24	17	23	1.4	34	41	175	115	54	118	18	11	22
25	31	31	2.5	37	39	144	103	45	84	35	9.9	20
26	36	40	2.4	34	39	117	80	40	65	74	9.5	18
27	36	34	2.6	31	39	98	62	36	61	63	14	17
28	38	45	3.1	29	38	80	53	32	54	50	14	18
29	31	46	3.4	28	39	70	47	29	46	40	12	16
30	27	94	4.6	27	-----	66	40	27	31	33	12	15
31	26	-----	4.7	26	-----	63	-----	28	-----	29	11	-----
TOTAL	637.2	970	998	1,409	1,373	4,223	1,708	2,177	2,328	1,025	572.4	620.1
4FAN	20.6	27.3	29.0	45.5	47.3	136	56.9	70.2	77.6	33.1	18.5	20.7
MAX	42	94	68	69	102	296	116	138	133	74	41	39
MIN	3.2	1.3	1.2	2.6	2.3	45	29	27	31	18	9.5	9.1
CFSM	1.18	1.57	1.67	2.41	2.72	7.82	3.27	4.03	4.46	1.90	1.06	1.19
IN.	1.36	1.75	1.92	3.01	2.94	9.03	3.65	4.65	4.98	2.19	1.22	1.33
CAL YR 1971	TOTAL 10,925.6 MEAN 29.9 MAX 170 MIN 3.2 CFSM 1.72 IN 23.36											
WTR YR 1972	TOTAL 17,790.7 MEAN 48.6 MAX 296 MIN 3.2 CFSM 2.79 IN 38.04											

PEAK DISCHARGE (BASE, 160 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1600	7.21	384				
3-8	1745	6.37	183				
3-18	1730	6.82	278				
3-23	0200	6.58	223				

BLACKSTONE RIVER BASIN

97

0111500 Branch River at Forestdale, R.I.

LOCATION.--Lat 41°59'47", long 71°33'47", Providence County, on left bank 20 ft upstream from abandoned bridge site, 400 ft downstream from milldam at Forestdale, 1 mile east of Slatersville, and 1.6 miles upstream from mouth.

DRAINAGE AREA.--91.2 sq mi.

PERIOD OF RECORD.--September to December 1909 and January 1912 to July 1913 (gage heights only; published as "at Branch Village"), January 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (from topographic map). Prior to July 28, 1913, nonrecording gage at site 1 mile downstream at different datum.

AVERAGE DISCHARGE.--32 years, 162 cfs (24.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,470 cfs Mar. 3 (gage height, 8.48 ft); minimum daily, 28 cfs Oct. 9.

Period of record: Maximum discharge, 4,980 cfs Mar. 18, 1968 (gage height, 11.90 ft), from rating curve extended above 2,100 cfs on basis of computation of peak flow over dam 400 ft above station; minimum daily, 5.2 cfs Oct. 7, 1948.

Maximum discharge since at least 1886, about 5,800 cfs Mar. 19, 1936, by computation of flow over dam 1 mile above station.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Prior to 1957, flow regulated by mills and reservoirs above station.

REVISIONS.--WHD Mass., N.H., R.I., Vt. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	50	305	140	108	223	301	212	700	250	117	40
2	53	91	202	130	106	340	283	202	772	210	114	42
3	49	108	158	200	116	1,510	268	232	508	180	96	105
4	46	99	141	190	454	1,740	234	831	344	190	116	207
5	35	83	124	210	364	1,010	246	845	323	170	125	131
6	32	77	116	190	230	692	243	625	277	150	108	93
7	36	81	174	170	198	538	252	439	256	130	107	73
8	32	78	225	150	174	696	245	379	252	140	101	65
9	28	71	202	140	162	852	237	402	248	150	87	57
10	85	66	187	220	152	604	213	597	600	110	71	57
11	120	57	182	250	143	495	186	487	670	98	62	52
12	75	53	170	230	134	445	169	394	445	90	60	47
13	60	51	164	220	189	431	177	333	295	95	55	46
14	52	50	150	250	534	413	267	285	250	130	54	56
15	52	49	150	200	374	390	237	448	220	140	75	68
16	56	50	158	180	308	399	217	628	200	100	67	60
17	48	47	154	160	265	815	228	500	360	85	59	54
18	42	44	139	150	237	1,620	217	382	380	80	55	44
19	39	46	129	150	255	1,180	187	311	600	96	53	70
20	36	48	120	154	221	965	259	322	700	204	50	180
21	34	50	110	162	187	685	512	546	500	173	44	140
22	34	57	105	164	200	693	392	468	450	133	41	160
23	44	56	100	156	168	1,250	538	355	650	106	38	140
24	52	54	110	160	164	967	603	284	600	87	36	120
25	84	85	160	168	154	760	505	247	450	122	46	110
26	94	111	150	156	162	620	425	204	380	273	46	79
27	83	99	140	134	154	535	327	186	330	222	51	65
28	77	127	135	125	156	484	277	169	290	172	67	68
29	62	154	135	119	172	430	250	151	230	129	55	66
30	52	346	130	117	-----	394	231	136	200	100	50	70
31	47	-----	150	116	-----	346	-----	145	-----	86	45	-----
TOTAL	1,680	2,438	4,775	5,261	6,241	22,422	8,726	11,745	12,480	4,401	2,151	2,565
MEAN	54.2	81.3	154	170	215	723	291	379	416	142	69.4	85.5
MAX	120	346	305	250	934	1,740	603	845	772	273	125	207
MIN	28	44	100	116	106	223	169	136	200	80	36	40
CFSH	.59	.89	1.69	1.86	2.36	7.93	3.19	4.16	4.56	1.56	.76	.94
IN.	.69	.99	1.95	2.15	2.95	9.15	3.56	4.79	5.09	1.80	.88	1.05

CAL YR 1971 TOTAL 50,674 MEAN 139 MAX 736 MIN 13 CFSH 1.52 IN 20.67
WTR YR 1972 TOTAL 84,885 MEAN 232 MAX 1,740 MIN 28 CFSH 2.54 IN 34.62

PEAK DISCHARGE (BASE, 880 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	2345	8.48	2,470	3-23	1045	6.38	1,390
3-9	0100	5.45	980	5-4	1830	5.59	1,040
3-18	0645	7.19	1,780	6-1	2145	5.39	956

NOTE.--No gage-height record Dec. 20 to Jan. 18, June 14 to July 18.

BLACKSTONE RIVER BASIN

01112500 Blackstone River at Woonsocket, R.I.

LOCATION.--Lat 42°00'22", long 71°30'13", Providence County, on right bank at Woonsocket, 50 ft upstream from Peters River pressure conduit. Records include flow of Peters River.

DRAINAGE AREA.--416 sq mi.

PERIOD OF RECORD.--February 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 107.42 ft above mean sea level.

AVERAGE DISCHARGE.--43 years, 717 cfs (23.41 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 8,280 cfs Mar. 3 (gage height, 10.25 ft); minimum daily, 110 cfs Oct. 5, 9.

Period of record: Maximum discharge, 32,900 cfs Aug. 19, 1955 (gage height, 21.8 ft, from floodmarks), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow, affected by failure of Horseshoe Dam on Mill River; minimum daily, 21 cfs Aug. 11, 1934, flow diverted around station in Hamlet Trench not included. Maximum discharge since at least 1645, that of Aug. 19, 1955.

REMARKS.--Records good. Flow regulated by powerplants, by West Hill Reservoir since May 1961, and by other reservoirs above station. Extremes and figures of daily discharge include flow diverted from Nashua River basin and, at times since January 1966, from Quabbin Reservoir for supply of Worcester, Mass., and, prior to July 1964, flow diverted around station in Hamlet Trench. No diversion from Quabbin Reservoir during year. See table below for figures of diversion and table with station 0111200 for monthend contents of West Hill Reservoir.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1931(M). WSP 871: 1938. WSP 1051: 1931.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	161	1,360	685	475	1,020	1,720	1,040	2,420	1,400	360	174
2	135	246	963	680	458	1,470	1,580	992	2,890	1,110	372	172
3	125	459	722	1,050	518	4,180	1,460	1,130	2,140	936	327	399
4	120	353	605	1,070	1,640	6,660	1,390	3,240	1,850	996	341	444
5	110	297	509	1,190	1,640	4,200	1,420	3,440	1,980	879	335	512
6	120	254	499	1,100	1,140	3,090	1,350	2,710	2,220	862	297	375
7	130	263	821	921	924	2,370	1,290	2,180	1,860	755	299	367
8	135	297	1,080	804	809	2,740	1,220	1,940	1,680	583	352	352
9	110	260	922	673	715	3,430	1,140	2,140	1,650	771	359	309
10	300	263	883	1,180	637	2,750	1,050	2,750	2,480	674	312	279
11	430	244	876	1,450	590	2,270	1,000	2,410	2,810	697	270	251
12	540	224	846	1,310	550	2,060	971	2,110	2,180	450	251	229
13	367	224	862	1,240	750	1,980	1,010	1,850	1,740	574	224	218
14	293	202	772	1,220	2,140	1,990	1,420	1,620	1,450	829	234	270
15	247	189	773	1,120	1,960	1,910	1,330	2,050	1,310	675	483	360
16	251	210	855	930	1,590	1,840	1,210	2,630	1,160	544	436	325
17	197	218	853	745	1,300	2,730	1,290	2,240	1,440	477	328	277
18	174	202	796	695	1,110	5,700	1,280	1,850	1,560	439	285	243
19	174	185	731	690	1,070	5,200	1,150	1,630	1,780	460	266	400
20	161	178	684	684	980	3,900	1,350	1,620	2,240	982	235	819
21	176	182	651	663	901	3,300	2,060	2,160	2,020	833	212	615
22	199	203	629	669	893	3,100	1,700	1,980	2,000	642	209	532
23	179	235	557	650	801	5,200	2,120	1,680	2,320	520	199	457
24	166	207	505	711	745	4,390	2,410	1,360	2,080	467	189	381
25	221	335	859	842	716	3,600	2,160	1,230	1,780	521	197	335
26	307	406	805	799	724	3,010	1,820	1,070	1,610	857	196	311
27	238	365	757	664	717	2,620	1,540	966	1,470	661	216	269
28	221	460	723	601	709	2,390	1,390	865	1,270	626	248	291
29	197	626	710	557	800	2,190	1,280	770	1,090	460	223	261
30	169	1,290	696	530	-----	2,060	1,170	703	1,060	303	197	269
31	149	-----	751	498	-----	1,860	-----	750	-----	322	185	-----
TOTAL	6,471	9,288	24,229	26,621	28,042	95,410	43,281	55,146	55,420	21,395	8,665	10,856
MEAN	222	310	782	859	967	3,078	1,443	1,779	1,847	687	280	362
MAX	830	1,290	1,360	1,450	2,140	6,660	2,410	3,440	2,890	1,400	483	844
MIN	110	161	499	498	458	1,020	971	703	1,060	303	185	172
(†)	29.5	25.7	11.9	14.9	14.9	.96	3.56	13.7	10.8	11.0	23.5	26.5
MEAN†	192	285	770	844	952	3,090	1,426	1,764	1,837	675	256	335
CFSM†	.46	.69	1.85	2.03	2.29	7.43	3.43	4.24	4.42	1.62	.62	.81
IN.†	.53	.76	2.13	2.34	2.67	8.57	3.83	4.89	4.93	1.87	.71	.90

CAL YR 1971	TOTAL 230,547	MEAN 632	MAX 2,940	MIN 98	MEAN† 611	CFSM† 1.47	IN† 19.96
WTR YR 1972	TOTAL 385,134	MEAN 1,052	MAX 6,660	MIN 110	MEAN† 1,037	CFSM† 2.49	IN† 33.93

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	2345	10.25	8,280	3-23	1630	8.35	5,720
3-18	-	8.9	6,400	5-4	1900	6.74	3,970

* About.

† Diversion, in cubic feet per second, from Nashua River basin for municipal supply of Worcester, Mass.; records furnished by city of Worcester.

‡ Adjusted for diversion and for change in contents in West Hill Reservoir.

BLACKSTONE RIVER BASIN

99

01112700 Blackstone River tributary at Woonsocket, R.I.

LOCATION.--Lat 42°00'18", long 71°29'23", Providence County, on left bank at edge of parking lot in Cass Park just off Cass Avenue, at Woonsocket, and 0.5 mile upstream from mouth.

DRAINAGE AREA.--2.31 sq mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 150 ft (from topographic map). Prior to Dec. 8, 1970, at site 0.25 mile upstream at different datum.

AVERAGE DISCHARGE.--7 years, 3.24 cfs (19.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 123 cfs July 19 (gage height, 3.13 ft); minimum, 0.17 cfs Oct. 9, 10.

Period of record: Maximum discharge, 285 cfs Mar. 18, 1968 (gage height, 3.52 ft, site and datum then in use), from rating curve extended above 52 cfs on basis of slope-area measurement at gage height 3.35 ft; no flow for many days during 1965, 1966, 1969, 1970.

REMARKS.--Records good. Recording rain gage at station since June 1966 (no winter records).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.64	5.4	2.2	1.5	13	4.4	5.4	15	4.0	2.2	.30
2	.14	5.4	3.6	7.6	1.5	15	4.0	7.2	5.4	3.2	1.2	.30
3	.14	2.3	2.7	6.1	9.0	72	3.7	13	4.0	3.0	1.7	19
4	.14	1.5	2.3	6.7	31	25	4.4	14	4.9	2.8	1.9	4.2
5	.14	.47	1.4	6.5	5.6	13	4.0	11	6.9	2.5	.93	2.1
6	.64	.74	3.1	4.4	3.7	10	3.7	8.6	4.4	2.4	.81	1.3
7	.36	1.0	4.8	3.6	3.3	9.9	3.5	8.0	4.7	2.2	1.7	1.0
8	.21	.44	3.6	3.1	3.0	24	3.3	8.3	4.6	2.2	1.6	.81
9	.17	.74	2.7	4.1	2.8	14	3.2	15	6.7	2.2	.80	1.9
10	15	.60	2.3	6.1	2.5	9.3	3.1	16	16	2.0	.60	1.1
11	1.3	.64	2.3	4.8	2.2	7.4	3.5	11	7.2	1.8	.56	.77
12	.64	.55	2.1	4.3	2.1	7.4	3.1	9.6	4.6	1.7	.52	.64
13	.37	.50	1.8	5.4	16	7.2	6.4	6.9	4.2	9.6	.52	1.1
14	.31	.50	1.7	5.4	10	6.4	5.4	4.9	3.5	4.0	2.3	2.6
15	.26	.50	3.2	4.1	5.1	6.1	4.0	20	3.2	2.6	2.3	1.4
16	.26	.64	3.1	3.1	4.7	8.0	3.8	11	4.0	2.0	1.1	.87
17	.24	.60	2.5	2.5	3.3	41	4.2	6.9	12	1.7	.77	.68
18	.31	.55	2.2	2.4	3.0	27	3.2	5.9	6.1	1.7	.73	.52
19	.31	.55	1.7	2.5	3.1	15	3.2	5.1	15	3.0	.60	8.3
20	.34	.64	1.8	2.9	2.8	11	12	12	13	3.3	.67	4.4
21	.34	.64	1.9	3.6	2.6	9.9	7.7	11	7.4	2.3	.47	2.3
22	.34	1.3	1.8	2.9	2.6	17	6.4	6.9	9.6	1.9	.39	2.0
23	.37	.64	1.4	2.9	2.3	17	13	5.6	15	1.6	.36	1.4
24	.45	.45	3.2	2.9	2.3	10	9.3	5.1	11	1.4	.36	1.1
25	2.4	4.0	2.9	3.2	2.2	8.3	7.4	4.4	6.9	4.4	.36	1.1
26	.20	5.0	2.5	2.7	2.4	7.4	7.7	4.2	5.9	1.9	.36	.87
27	.37	3.6	2.2	2.2	2.5	6.7	7.2	3.8	5.1	1.5	1.7	.81
28	.37	5.4	2.4	2.1	3.2	5.9	6.4	3.5	4.2	1.3	.60	.68
29	.31	7.4	2.2	1.4	6.1	5.4	5.9	3.2	3.5	1.1	.39	.73
30	.31	11	2.4	1.4	-----	4.6	5.9	3.0	4.9	1.0	.33	1.1
31	.25	-----	2.5	1.4	-----	4.6	-----	5.1	-----	1.2	.30	-----
TOTAL	29.01	67.18	60.2	116.4	141.9	438.5	163.5	250.6	219.4	77.5	28.93	65.38
MEAN	.44	2.24	2.59	3.75	4.89	14.1	5.45	8.41	7.31	2.50	.93	2.18
MAX	16	11	5.4	7.6	31	72	13	20	16	9.6	2.3	19
MIN	.17	.45	1.4	1.8	1.5	4.6	3.1	3.0	3.2	1.0	.30	.30
CFSM	.41	.97	1.12	1.62	2.12	6.10	2.36	3.64	3.16	1.08	.40	.94
IN.	.47	1.08	1.29	1.87	2.29	7.06	2.63	4.20	3.53	1.25	.47	1.05

CAL YR 1971 TOTAL 472.59 MEAN 2.66 MAX 17 MIN .09 CFSM 1.15 IN 15.66
 WTH YR 1972 TOTAL 1,688.50 MEAN 4.61 MAX 72 MIN .17 CFSM 2.00 IN 27.14

PEAK DISCHARGE (BASE, 55 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1530	3.06	109	7-13	1715	2.94	88
2-4	0045	3.10	117	7-19	1930	3.13	123
2-13	1830	2.72	56	7-25	1615	2.83	71
3-3	0630	3.12	121	9-3	1400	2.76	61
3-17	0830	2.72	56	9-19	1515	2.77	62
5-15	0530	2.77	62				

MOSHASSUCK RIVER BASIN

01114000 Moshasuck River at Providence, R.I.

LOCATION.--Lat 41°50'02", long 71°24'42", Providence County, on left bank 800 ft upstream from bridge on U. S. Highway 44, at Providence, and 0.5 mile above mouth.

DRAINAGE AREA.--23.1 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.31 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 36.0 cfs (21.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 785 cfs Oct. 10 (gage height, 3.35 ft); minimum discharge, 4.8 cfs Oct. 4, 24; minimum daily, 5.3 cfs Oct. 3, 4.

Period of record: Maximum discharge, 2,390 cfs Mar. 18, 1968 (gage height, 4.34 ft), from rating curve extended above 460 cfs; maximum gage height, 4.40 ft Aug. 1, 1967; minimum, 1.3 cfs Aug. 23, 1970; minimum daily, 1.7 cfs Aug. 10, 1970.

REMARKS.--Records good except those for period of no gage-height record or backwater from tree, which are fair. Occasional regulation at low flow.

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt., 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	12	37	22	18	62	53	39	129	58	149	11
2	6.1	15	24	60	16	67	48	41	71	48	46	11
3	5.3	13	21	45	29	400	47	76	52	39	25	187
4	5.3	12	18	52	140	215	53	153	41	42	31	71
5	6.9	9.9	16	52	55	125	53	81	45	36	26	34
6	13	9.9	32	44	38	100	48	59	39	33	19	22
7	12	11	35	38	35	85	47	52	46	31	18	19
8	8.6	6.9	27	33	30	150	42	55	46	32	68	18
9	7.3	7.3	22	40	27	125	40	107	50	31	28	23
10	129	6.9	20	55	27	87	38	112	119	26	20	30
11	39	10	21	48	27	70	37	72	72	23	17	20
12	13	8.5	18	35	24	70	40	59	51	23	15	15
13	9.3	7.3	18	37	38	68	72	54	41	59	15	30
14	8.5	6.9	28	36	74	61	80	49	40	53	15	40
15	7.7	6.9	33	33	47	85	62	165	36	35	36	35
16	6.9	11	29	29	38	90	45	126	35	27	21	26
17	6.1	8.5	24	23	32	270	40	81	87	23	17	21
18	6.1	6.5	27	21	30	250	35	67	62	22	24	18
19	6.5	6.9	22	23	47	116	35	60	182	21	17	200
20	6.1	8.1	22	25	47	96	96	132	107	71	15	300
21	6.1	8.9	19	29	36	84	84	131	73	33	14	100
22	6.5	13	22	28	35	143	61	79	78	26	14	60
23	5.7	10	15	26	29	162	125	63	138	22	14	40
24	5.7	7.7	20	26	29	107	83	55	102	29	16	32
25	30	89	29	26	29	84	66	47	76	18	15	27
26	9.3	44	25	19	32	72	56	42	64	92	14	25
27	8.1	26	23	20	33	66	50	39	60	35	28	23
28	7.3	42	22	19	39	63	46	36	50	23	15	20
29	6.9	58	21	19	52	60	43	33	45	19	14	22
30	6.1	85	20	19	-----	57	40	30	65	18	13	23
31	7.3	-----	24	18	-----	55	-----	44	-----	16	11	-----
TOTAL	408.2	570.1	734	1,000	1,133	3,545	1,665	2,239	2,106	1,055	790	1,583
MEAN	13.2	19.0	23.7	32.3	39.1	114	55.5	72.2	70.2	34.0	25.5	50.1
MAX	129	89	37	60	140	400	125	165	182	92	149	300
MIN	5.3	6.5	15	18	16	55	35	30	35	14	11	11
CFSM	.57	.82	1.03	1.40	1.69	4.94	2.40	3.13	3.04	1.47	1.10	2.17
IN.	.66	.92	1.18	1.61	1.82	5.71	2.68	3.61	3.39	1.70	1.27	2.42

CAL YR 1971 TOTAL 11,250.0 MEAN 30.8 MAX 180 MIN 5.1 CFSM 1.33 IN 18.12
WTR YR 1972 TOTAL 16,748.3 MEAN 45.8 MAX 400 MIN 5.3 CFSM 1.98 IN 26.97

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1530	3.35	785	8-1	0730	*6.07	692
3-3	1330	4.38	705	9-3	1600	*5.61	519
5-20	1730	*5.56	501	9-19	1300	*6.26	775

* Gage height at temporary bubble-gage orifice 200 ft upstream.

NOTE.--No gage-height record Dec. 21 to Jan. 20. Backwater from tree Oct. 1-14.

WOONASQUATUCKET RIVER BASIN

101

01114500 Woonasquacket River at Centerdale, R.I.

LOCATION.--Lat 41°51'32", long 71°29'16", Providence County, on right bank 75 ft downstream from bridge on U.S. Highway 44 at Centerdale and 0.5 miles upstream from mouth.

DRAINAGE AREA.--38.3 sq mi.

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map).

AVERAGE DISCHARGE.--31 years, 69.1 cfs (24.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs Mar. 3 (gage height, 6.39 ft); minimum daily, 15 cfs Oct. 2-5, 8, 9, 13-16.

Period of record: Maximum discharge, 1,440 cfs Mar. 18, 1968 (gage height, 7.75 ft, from floodmarks); minimum daily, 2.1 cfs Aug. 26, 1963. Maximum discharge during March 1936, 1,000 cfs, by computation of flow over dam 0.7 mile below station.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Some regulation by reservoirs above station; regulation greater prior to 1956. Negligible leakage through bypass control.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	55	40	43	85	130	88	142	101	68	25
2	15	20	45	50	41	120	119	84	133	95	51	26
3	15	19	41	60	52	714	111	92	117	94	46	55
4	15	18	38	54	208	786	108	175	101	82	54	40
5	15	18	36	75	100	528	110	155	94	59	45	36
6	17	17	34	68	80	379	103	139	84	48	40	50
7	16	19	52	62	70	292	99	126	87	58	41	48
8	15	17	50	56	64	351	94	119	87	62	59	44
9	15	16	46	54	60	353	89	137	87	70	47	44
10	39	16	43	80	56	294	84	177	182	61	41	44
11	21	16	41	75	53	247	83	149	146	56	36	40
12	17	16	39	70	50	216	82	131	124	50	34	38
13	15	17	38	66	90	198	94	120	108	60	33	39
14	15	16	37	64	130	180	110	110	98	84	36	47
15	15	16	47	70	100	195	98	235	88	72	35	50
16	15	17	45	64	90	195	93	233	79	64	33	43
17	18	18	42	60	80	396	94	202	115	58	32	41
18	19	18	40	58	75	548	86	174	110	51	32	38
19	18	19	38	58	110	463	81	151	193	53	32	69
20	18	19	36	60	110	367	115	167	193	66	31	100
21	18	19	38	63	85	296	137	216	182	56	29	69
22	17	19	38	60	75	304	123	186	226	50	29	66
23	17	18	33	60	70	374	186	154	222	46	29	59
24	17	18	38	60	66	317	175	133	193	42	28	53
25	21	40	45	63	63	272	157	116	160	53	28	50
26	17	43	41	58	60	233	139	104	139	76	28	48
27	17	35	39	53	58	202	123	94	124	60	28	47
28	17	31	38	52	62	180	111	88	107	55	27	48
29	17	50	37	50	68	163	101	81	98	50	26	53
30	18	70	37	48	-----	151	93	74	103	44	26	67
31	18	-----	45	45	-----	140	-----	73	-----	42	26	-----
TOTAL	543	694	1,272	1,856	2,269	9,539	3,328	4,283	3,922	1,908	1,130	1,478
MEAN	17.5	23.1	41.0	59.9	78.2	308	111	138	131	61.5	36.5	49.3
MAX	39	70	55	80	208	786	186	235	226	101	68	100
MIN	15	16	33	40	41	85	81	73	79	38	26	26
CFSM	.46	.60	1.07	1.56	2.04	8.04	2.90	3.60	3.42	1.61	.95	1.29
IN.	.53	.67	1.24	1.80	2.20	9.27	3.23	4.16	3.81	1.85	1.10	1.44

CAL YR 1971 TOTAL 20,895 MEAN 57.2 MAX 296 MIN 15 CFSM 1.49 IN 20.29
WTH YR 1972 TOTAL 32,222 MEAN 88.0 MAX 786 MIN 15 CFSM 2.30 IN 31.30

NOTE.--No gage-height record Nov. 20 to Jan. 19, Feb. 5 to Mar. 2. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

PAWTUCKET RIVER BASIN

01115100 Masquithawk Brook near North Scituate, R.I.

LOCATION.--Lat 41°51'05", long 71°37'24", Providence County, on right bank 10 ft downstream from culvert on Rocky Hill Road, 0.2 mile upstream from mouth, and 2.2 miles northwest of North Scituate.

DRAINAGE AREA.--3.06 sq. mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (from topographic map).

AVERAGE DISCHARGE.--7 years (1966-72), 5.67 cfs (25.16 inches per year).

EXTREMES.--Current year: Maximum discharge, about 185 cfs Mar. 3; maximum gage height not determined; no flow Oct. 1-6.
Period of record: Maximum discharge, 630 cfs Mar. 18, 1968 (gage height, 3.40 ft), from rating curve extended above 250 cfs; no flow many days during most years.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Recording rain gage at station since June 1966 (no winter records).

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt. 1968: 1967.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.4	12	4.5	2.2	9.0	7.2	5.1	27	11	7.5	.17
2	0	1.3	4.8	4.9	2.0	20	6.5	5.1	19	6.8	5.7	.13
3	0	2.6	4.7	18	2.5	105	6.0	6.0	11	4.6	3.2	5.1
4	0	2.3	4.1	11	25	54	5.7	30	7.2	3.8	5.4	15
5	0	1.5	3.2	17	14	19	7.2	20	6.0	3.2	4.0	4.3
6	0	1.2	2.9	18	6.2	13	7.9	13	5.7	3.2	2.4	2.4
7	.02	1.1	9.0	7.3	4.3	13	7.2	9.4	5.4	2.8	2.5	1.6
8	.02	1.4	4.7	5.9	3.9	33	6.0	9.0	7.9	2.5	6.5	1.1
9	.01	1.3	6.2	4.7	3.5	28	5.7	12	6.8	3.7	3.7	1.1
10	1.5	1.0	5.1	16	3.3	15	5.4	23	2.8	3.0	2.4	1.5
11	4.1	.94	4.7	13	3.2	10	4.0	15	1.8	2.2	1.6	1.1
12	1.2	.80	4.1	9.7	3.2	12	6.0	11	1.1	1.8	1.2	.67
13	.64	.74	3.9	7.9	5.9	15	6.8	4.3	7.5	4.0	1.1	.51
14	.27	.58	3.3	11	23	13	1.6	7.2	6.0	7.0	.87	1.6
15	.17	.62	3.5	8.3	12	9.4	9.8	34	5.1	4.0	2.1	2.1
16	.14	.80	5.4	5.1	7.3	16	7.9	26	4.0	2.8	1.9	1.5
17	.12	.87	5.1	3.7	4.9	54	7.9	17	13	2.3	1.3	.93
18	.11	.87	4.1	3.5	3.7	74	6.8	13	15	2.0	1.1	.67
19	.08	.80	3.2	4.1	3.2	34	5.7	9.8	36	3.5	.99	1.8
20	.08	.80	2.9	4.1	3.2	22	11	12	22	5.0	.67	9.0
21	.04	.80	3.0	4.9	5.4	17	22	23	14	3.5	.51	4.6
22	.08	.94	3.3	5.1	7.6	23	14	15	12	2.2	.43	3.3
23	.08	1.2	2.5	4.7	5.4	49	26	9.8	24	1.7	.33	7.4
24	.04	.94	3.2	4.5	4.3	23	21	7.5	21	1.9	.27	1.7
25	.57	2.3	9.0	4.5	4.1	18	16	6.2	13	6.0	.25	1.6
26	1.3	6.8	7.3	4.1	3.7	14	12	5.1	9.8	10	.23	1.3
27	.94	5.1	6.5	3.0	3.9	12	9.0	4.6	6.3	6.0	.43	1.1
28	.88	8.3	5.1	2.7	4.5	10	7.5	3.8	6.5	4.0	.87	.93
29	.52	10	4.7	2.7	5.9	9.0	6.8	3.5	5.1	2.8	.51	.80
30	.40	22	4.1	2.7	-----	8.3	6.0	2.8	5.7	2.2	.33	.87
31	.36	-----	5.4	2.6	-----	7.5	-----	3.0	-----	1.7	.23	-----
TOTAL	13.35	80.58	158.0	211.2	181.3	759.2	287.8	370.2	375.0	121.2	60.52	70.88
MEAN	.43	2.69	5.10	6.81	6.29	24.5	9.59	11.9	12.5	3.91	1.95	2.36
MAX	4.1	22	12	19	25	105	26	34	30	11	7.5	15
MIN	0	.48	2.5	2.6	2.0	7.5	4.6	2.8	4.0	1.7	.23	.13
CFSM	.14	.98	1.67	2.23	2.04	8.01	3.13	3.89	4.09	1.28	.64	.77
IN.	.16	.98	1.92	2.57	2.20	9.23	3.90	4.50	4.56	1.47	.74	.86

CAL YR 1971 TOTAL 1,802.42 MEAN 4.94 MAX 42 MIN 0 CFSM 1.61 IN 21.91
WTR YR 1972 TOTAL 2,689.23 MEAN 7.35 MAX 105 MIN 0 CFSM 2.40 IN 32.69

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	-	-	1185				
3-17	-	-	1140				
3-23	0315	2.52	82				
5-15	1345	2.45	69				

† About.

NOTE.--No gage-height record Mar. 17, 18.

PAWTUXET RIVER BASIN

103

01115630 Nooseneck River at Nooseneck, R.I.

LOCATION.--Lat 41°37'36", long 71°37'59", Kent County, on right bank at upstream side of bridge on State Highway 3 at Nooseneck and 5.5 miles southwest of Washington.

DRAINAGE AREA.--8.23 sq mi.

PERIOD OF RECORD.--1961-63 (occasional low-flow measurements), November 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (from topographic map).

AVERAGE DISCHARGE.--8 years (1964-72), 16.6 cfs (27.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 210 cfs Mar. 3 (gage height, 5.16 ft); minimum, 2.4 cfs Oct. 3-6.

Period of record: Maximum discharge, 318 cfs Mar. 18, 1968 (gage height, 6.13 ft); minimum, 0.81 cfs Sept. 8, 9, 1964.

REMARKS.--Records good except those for period of no gage-height record, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	7.1	21	16	9.2	36	34	22	63	41	15	4.6
2	2.7	8.7	15	19	9.0	45	32	22	45	32	12	4.6
3	2.5	9.0	13	27	15	140	31	25	35	27	11	39
4	2.4	9.0	12	22	54	87	30	64	31	25	11	33
5	2.4	7.4	12	27	35	63	32	44	36	23	9.0	14
6	3.0	6.4	12	22	23	55	31	34	31	22	8.0	12
7	3.6	7.7	20	18	18	50	29	31	34	21	7.7	9.5
8	3.3	8.0	17	16	17	64	28	28	34	19	8.5	8.0
9	3.0	6.8	15	16	16	62	25	34	31	17	7.7	7.7
10	19	6.1	14	28	15	49	25	52	31	16	6.8	7.1
11	20	5.8	14	26	14	42	25	37	28	15	6.5	6.5
12	8.0	5.6	12	23	13	42	26	33	23	14	6.2	5.9
13	6.4	5.6	12	20	18	44	28	30	22	21	6.2	5.9
14	5.8	5.1	11	19	36	40	37	28	22	32	6.2	6.5
15	5.3	4.8	13	18	30	48	29	59	20	23	14	6.2
16	5.3	5.8	14	15	25	54	26	49	19	17	8.5	5.9
17	5.1	5.8	13	13	21	110	28	39	42	14	7.4	5.6
18	5.1	5.3	12	14	19	104	25	34	36	12	7.1	5.3
19	4.6	5.3	10	14	40	65	23	32	99	12	6.8	18
20	4.4	5.8	11	15	60	55	28	39	72	14	6.2	19
21	4.1	5.6	11	15	44	51	35	51	51	14	5.6	12
22	4.1	5.6	11	15	33	61	28	38	52	12	5.6	19
23	4.1	5.3	10	14	26	83	49	34	59	11	4.9	13
24	4.4	5.1	12	14	20	58	40	31	49	11	4.8	11
25	10	22	15	13	19	50	34	28	41	16	5.3	9.0
26	9.0	25	14	12	19	45	31	27	38	40	5.3	8.5
27	7.1	13	14	11	20	42	28	25	34	20	8.0	8.0
28	5.8	19	13	10	20	40	26	24	31	16	6.8	7.4
29	5.8	18	13	10	26	37	25	22	28	13	5.9	7.1
30	5.6	42	13	10	-----	36	23	22	40	12	5.0	7.1
31	5.3	-----	20	9.5	-----	35	-----	22	-----	11	4.8	-----
TOTAL	179.9	291.7	419	521.5	714.2	1,793	891	1,060	1,177	593	233.7	326.4
MEAN	5.80	9.72	13.5	16.8	24.6	57.8	29.7	34.2	39.2	19.1	7.54	10.9
MAX	20	42	21	28	60	140	49	64	99	41	15	39
MIN	2.4	4.8	10	9.5	9.0	35	23	22	19	11	4.8	4.6
CFSM	.70	1.18	1.64	2.04	2.99	7.02	3.61	4.16	4.76	2.32	.92	1.32
IN.	.81	1.32	1.89	2.36	3.23	8.10	4.03	4.79	5.32	2.68	1.06	1.48

CAL YR 1971 TOTAL 5,201.2 MEAN 14.2 MAX 65 MIN 2.0 CFSM 1.73 IN 23.51
WTR YR 1972 TOTAL 8,200.4 MEAN 22.4 MAX 140 MIN 2.4 CFSM 2.72 IN 37.07

PEAK DISCHARGE (BASE, 130 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1245	5.16	210				
3-17	2000	4.68	157				
6-19	1500	4.80	169				

NOTE.--No gage-height record Jan. 7 to Feb. 23.

PAWTUXET RIVER BASIN

01115770 Carr River near Nooseneck, R.I.

LOCATION.--Lat 41°33'35", long 71°36'30", Kent County, on left bank at upstream side of bridge on Burnt Sawmill Road, 1.5 miles northeast of Nooseneck, and 4 miles southwest of Washington.

DRAINAGE AREA.--6.73 sq mi.

PERIOD OF RECORD.--1961-63 (occasional low-flow measurements), November 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (from topographic map). Prior to Nov. 27, 1963, reference point at site 75 ft upstream at datum 9 ft higher.

AVERAGE DISCHARGE.--8 years (1964-72), 10.4 cfs 20.99 inches per year, adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 66 cfs Mar. 17, June 19; maximum gage height, 4.86 ft Mar. 17; minimum discharge, 1.0 cfs Oct. 4-6; minimum daily, 1.0 cfs Oct. 4, 5.

Period of record: Maximum discharge, 221 cfs Mar. 18, 1968 (gage height, 6.50 ft); minimum, 0.30 cfs Aug. 25, 26, 1968; minimum daily, 0.36 cfs Aug. 18, Sept. 12, 1965.

REMARKS.--Records good. Flow regulated by Carr Pond and other ponds above station. Prior to May 1972, diversion from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.4	16	7.6	4.1	19	19	12	27	29	9.4	3.7
2	1.1	3.0	10	7.5	3.9	25	22	12	29	24	9.4	3.7
3	1.1	3.4	7.0	11	4.9	48	17	17	22	20	8.5	20
4	1.0	3.4	5.4	10	25	51	14	42	17	17	8.2	18
5	1.0	3.2	8.4	12	19	39	14	37	16	16	7.5	13
6	1.1	3.0	4.2	11	11	29	15	25	15	15	7.1	10
7	1.2	3.0	7.8	7.8	8.9	24	13	19	17	14	6.3	8.5
8	1.2	3.0	6.4	6.6	7.8	36	11	17	14	13	6.3	7.5
9	1.2	3.0	7.4	6.6	7.4	34	10	21	17	12	6.3	7.0
10	6.7	3.0	6.4	13	7.0	26	10	34	16	11	5.5	6.0
11	13	2.8	5.6	13	6.6	21	11	26	15	11	5.2	5.5
12	6.3	2.8	5.3	11	5.6	20	13	22	13	10	4.9	5.0
13	3.9	2.7	4.4	9.8	7.8	21	16	19	12	11	4.9	5.0
14	3.2	2.7	4.5	9.2	17	20	24	17	11	17	4.6	5.6
15	2.7	2.5	6.6	8.6	15	23	21	31	11	15	7.5	5.3
16	2.4	2.5	7.5	6.6	13	29	14	35	10	12	7.9	5.0
17	2.2	2.5	6.6	5.2	10	46	17	27	21	9.7	7.1	4.7
18	2.1	2.5	5.9	5.2	8.9	57	13	23	25	4.2	6.3	4.5
19	1.9	2.4	5.1	6.3	16	43	11	24	47	7.5	5.5	11
20	1.8	2.4	4.9	6.6	28	34	14	29	55	8.8	5.2	16
21	1.8	2.4	4.9	6.6	23	29	30	37	40	9.1	4.9	12
22	1.8	2.4	4.8	6.6	18	32	26	31	40	9.1	4.6	12
23	1.8	2.4	4.4	6.6	14	43	28	25	40	8.2	4.3	11
24	1.8	2.4	5.2	6.6	13	37	23	22	34	8.6	4.0	9.7
25	2.8	9.4	6.4	6.6	12	30	20	19	29	9.7	4.0	8.8
26	3.9	14	7.4	5.9	12	25	17	17	28	22	3.8	8.2
27	3.2	4.2	6.7	4.9	12	25	15	16	24	19	5.5	7.1
28	2.8	9.0	6.6	4.6	12	24	14	15	21	13	5.9	7.5
29	2.8	8.7	5.6	4.6	13	22	13	13	19	11	5.2	9.4
30	2.5	21	5.7	4.6	-----	20	13	13	24	9.7	4.0	9.4
31	2.2	-----	8.7	4.4	-----	20	-----	13	-----	8.5	3.8	-----
TOTAL	83.7	137.1	202.2	236.6	355.9	946	494	714	712	409.3	183.6	260.1
MEAN	2.70	4.57	6.52	7.63	12.3	30.5	16.5	23.0	23.7	13.2	5.92	8.67
MAX	13	21	16	13	26	57	30	42	55	29	9.4	20
MIN	1.0	2.4	4.2	4.4	3.9	10	16	12	10	7.5	3.8	3.7
MEAN†	3.49	5.27	7.24	8.36	13.0	31.3	17.2	23.0	23.7	13.2	5.92	8.67
CFSMT	.52	.78	1.08	1.24	1.93	4.65	2.56	3.42	3.52	1.96	.88	1.29
IN.†	.60	.87	1.24	1.43	2.09	5.36	2.85	3.95	3.94	2.26	1.01	1.44

CAL YR 1971 TOTAL 3,244.34 MEAN 8.89 MAX 49 MIN .84 MEAN† 9.90 CFSMT 1.47 INT 19.97
WTR YR 1972 TOTAL 4,734.50 MEAN 12.9 MAX 57 MIN 1.0 MEAN† 13.4 CFSMT 1.99 INT 27.04

PEAK DISCHARGE (BASE, 65 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	2245	4.86	66				
6-19	2115	4.85	66				

† Adjusted for diversion from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick. Records of diversion furnished by Kent County Water Authority.

PAWTUXET RIVER BASIN

105

01116000 South Branch Pawtuxet River at Washington, R.I.

LOCATION.--Lat 41°41'24", long 71°33'59", Kent County, on right bank 150 ft downstream from highway bridge at Washington and 0.9 mile upstream from outlet of Tiogue Lake.

DRAINAGE AREA.--63.8 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.76 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 126 cfs (26.82 inches per year), adjusted for diversion and storage.

EXTREMES.--Current year: Maximum discharge, 938 cfs Mar. 4 (gage height, 3.68 ft); minimum daily, 4.5 cfs Oct. 24.

Period of record: Maximum discharge, 1,860 cfs Mar. 18, 1968 (gage height, 5.13 ft); minimum daily, 2.8 cfs Aug. 27, 1944.

Flood in March 1936 reached a discharge of 1,810 cfs, by computation of flow over dam just above gage.

REMARKS.--Records good except those below 30 cfs, which are fair. Flow regulated by Flat River Reservoir 2 miles upstream (usable capacity, 250,000,000 cu ft) and smaller reservoirs. Prior to May 1972, diversion above station from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick. See table below for figures of diversion and monthend contents.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	62	71	96	117	160	240	202	261	281	142	97
2	48	49	60	58	117	232	174	163	358	268	127	103
3	12	47	57	134	122	485	185	171	275	195	93	112
4	49	47	44	134	149	888	184	280	194	80	96	210
5	41	47	19	138	129	659	194	415	168	142	26	203
6	43	6.7	71	131	124	474	199	341	169	161	36	145
7	43	16	66	127	124	373	186	282	209	130	120	80
8	41	57	62	124	123	364	176	137	208	52	112	121
9	3.6	47	62	127	121	420	169	249	157	125	81	164
10	14	47	58	134	120	377	162	316	186	181	80	53
11	21	46	11	134	120	318	157	317	240	104	85	93
12	27	46	22	131	120	281	118	207	117	97	22	74
13	46	6.3	73	131	131	263	178	122	118	134	27	69
14	51	13	62	131	137	261	214	198	121	165	93	74
15	43	58	64	127	131	289	219	293	121	163	114	77
16	7.3	49	68	127	127	306	187	407	111	157	88	19
17	13	47	66	127	124	411	198	358	110	116	82	27
18	57	47	9.1	127	124	773	144	254	239	84	79	85
19	43	47	28	127	141	677	139	234	389	82	21	96
20	43	6.7	76	125	146	508	184	235	625	93	31	134
21	43	13	73	127	137	412	218	296	532	98	92	139
22	44	60	80	126	138	391	225	309	411	31	80	142
23	6.3	47	80	125	138	510	259	270	390	50	75	136
24	4.5	47	117	126	138	509	298	233	369	152	79	133
25	14	27	111	127	135	430	278	203	270	138	74	97
26	62	64	35	124	136	368	242	143	240	208	19	74
27	47	12	63	124	135	322	214	101	254	168	35	80
28	47	26	73	124	136	294	155	162	165	127	96	76
29	44	73	71	81	141	247	105	197	207	32	74	71
30	3.0	83	120	28	-----	194	152	125	275	51	73	19
31	16	-----	134	115	-----	238	-----	117	-----	125	69	-----
TOTAL	1,333.7	1,243.7	1,993.1	3,717	3,781	12,434	5,744	7,337	7,489	3,990	2,321	3,005
MEAN	33.3	41.5	64.3	120	130	401	191	237	250	129	74.9	100
MAX	68	83	134	138	149	888	298	415	625	281	142	210
MIN	4.5	6.3	9.1	28	117	160	105	101	110	31	19	19
(†)	.79	.70	.71	.73	.75	.76	.71	0	0	0	0	0
(‡)	110.5	133.5	203.5	203.5	246.5	246.5	257.5	257.5	250.0	250.0	194.5	136.0
MEAN††	41.5	51.0	91.1	121	148	402	196	237	247	129	54.2	77.6
CFSM††	.65	.80	1.43	1.90	2.32	6.30	3.07	3.71	3.87	2.02	.85	1.22
IN.††	.75	.89	1.65	2.18	2.51	7.26	3.44	4.28	4.32	2.33	.98	1.36

CAL Y4 1971 TOTAL 54,147.8 MEAN 93.6 MAX 328 MIN 3.7 MEAN† 94.5 CFSM† 1.48 IN† 20.11
 WTA Y4 1972 TOTAL 54,148.5 MEAN 148 MAX 888 MIN 4.5 MEAN† 150 CFSM† 2.35 IN† 31.93

† Diversion, in cubic feet per second, from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick; records furnished by Kent County Water Authority.

‡ Monthend contents, in millions of cubic feet, in Flat River Reservoir; records furnished by Quindnick Reservoir Co.

†† Adjusted for diversion and change in reservoir contents.

PAWTUXET RIVER BASIN

01116300 Furnace Hill Brook at Cranston, R.I.

LOCATION.--Lat 41°45'23", long 71°29'52", Providence County, on left bank 30 ft downstream from bridge on Phenix Avenue at Cranston and 1.0 mile upstream from mouth.

DRAINAGE AREA.--4.19 sq mi.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 145 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 7.68 cfs (24.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 495 cfs Mar. 3 (gage height, 4.55 ft); minimum, 0.13 cfs Oct. 1.

Period of record: Maximum discharge, 586 cfs Mar. 18, 1968 (gage height, 4.67 ft); no flow Aug. 18, 1965, and many days during summer of 1966.

REMARKS.--Records good except those for period of doubtful gage-height record, which are fair. Recording rain gage at station since June 1966 (no winter records).

REVISIONS (WATER YEARS)--WRD Mass., N.H., R.I., Vt. 1963: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	1.0	15	8.5	2.0	44	5.1	5.3	27	14	27	.80
2	.15	1.3	9.0	18	1.7	40	5.3	5.6	16	6.7	9.5	.75
3	.16	1.4	6.0	28	3.5	186	4.5	8.5	6.7	3.9	4.6	27
4	.16	1.6	5.0	20	6.0	55	4.6	44	4.3	3.1	7.4	22
5	.18	1.3	3.7	28	2.6	36	6.4	24	5.7	2.6	4.3	7.0
6	.22	1.2	3.7	16	1.6	28	6.1	15	4.3	2.4	3.0	3.7
7	.20	1.5	17	10	12	24	6.0	11	3.9	1.6	2.6	2.4
8	.18	1.4	13	7.4	9.5	52	5.0	10	4.3	3.0	8.5	1.6
9	.20	1.2	9.0	8.5	7.4	33	4.3	25	3.9	7.1	5.0	1.9
10	.20	1.1	7.1	27	6.4	23	3.5	36	13	3.1	3.0	2.4
11	3.0	1.1	6.7	17	5.7	18	3.7	19	8.5	1.9	2.2	1.7
12	1.3	1.0	6.7	13	5.3	16	4.3	14	4.6	1.5	1.8	1.1
13	.25	1.0	5.3	11	2.3	17	10	10	3.3	3.7	1.2	1.1
14	.70	.90	4.3	10	35	15	19	4.5	2.8	9.0	1.0	2.0
15	.25	.90	7.1	7.1	20	18	11	36	2.6	3.5	3.3	2.8
16	.20	1.1	11	4.3	17	30	9.0	27	2.2	2.2	2.8	2.2
17	.25	.95	7.9	3.5	12	98	8.5	17	13	1.5	1.9	1.8
18	.60	.90	6.4	3.5	10	61	6.1	13	11	1.3	1.6	1.6
19	.75	.90	4.3	4.3	28	31	5.3	9.5	59	1.1	1.2	41
20	.70	1.0	4.3	4.5	30	22	19	25	35	1.5	1.1	45
21	.65	.95	5.3	6.4	21	18	22	34	19	1.3	.90	23
22	.65	1.2	5.3	5.7	16	36	13	14	19	1.0	1.1	22
23	.70	1.3	3.5	5.7	14	40	37	12	37	.85	.65	14
24	.70	1.1	5.7	6.0	18	23	23	7.4	26	1.0	.50	9.5
25	1.1	17	13	6.0	8.5	16	16	5.7	14	12	.75	7.1
26	1.3	20	9.5	4.5	7.9	13	12	4.3	14	22	.90	5.7
27	1.0	9.5	9.5	3.1	8.5	11	9.0	3.7	9.0	5.3	1.7	5.3
28	.90	19	8.5	3.0	12	9.5	7.9	3.1	6.0	2.6	1.6	3.7
29	.60	17	6.7	2.8	29	7.9	6.7	2.6	4.6	1.7	1.4	3.1
30	.75	34	7.1	2.6	-----	7.1	5.7	2.4	13	1.3	1.3	3.5
31	.60	-----	15	2.4	-----	6.4	-----	2.6	-----	1.1	.95	-----
TOTAL	25.44	143.80	240.9	298.0	465.9	1,038.9	300.9	458.6	392.7	125.15	104.75	266.75
MEAN	.82	4.74	7.77	9.61	16.1	33.5	10.0	14.8	13.1	4.04	3.38	8.89
MAX	5.0	34	17	28	68	186	37	44	59	22	27	45
MIN	.14	.90	3.5	2.4	1.7	6.4	3.5	2.4	2.2	.85	.50	.75
CFSM	.20	1.14	1.85	2.29	3.84	8.00	2.39	3.53	3.13	.96	.81	2.12
IN.	.23	1.28	2.14	2.65	4.14	9.22	2.67	4.07	3.49	1.11	.93	2.37
CAL YR 1971	TOTAL	2,300.05	MEAN	6.30	MAX	45	MIN	.10	CFSM	1.50	IN	20.42
WTR YR 1972	TOTAL	3,861.79	MEAN	10.6	MAX	186	MIN	.14	CFSM	2.53	IN	34.29

PEAK DISCHARGE (BASE, 135 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0915	4.55	495				
3-17	1115	3.63	140				

NOTE.--Doubtful gage-height record Mar. 3 to Apr. 26.

01116500 Pawtuxet River at Cranston, R.I.

LOCATION.--Lat 41°45'03", long 71°26'44", Providence County, on left bank at Cranston, 0.7 mile upstream from Pocasset River.

DRAINAGE AREA.--200 sq. mi.

PERIOD OF RECORD.--December 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8.00 ft above mean sea level.

AVERAGE DISCHARGE.--32 years (1940-72), 397 cfs (26.96 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Mar. 19 (gage height, 9.35 ft); minimum daily, 61 cfs Oct. 17, 24.
Period of record: Maximum discharge, 3,110 cfs Mar. 18, 1968 (gage height, 11.53 ft); minimum daily, 22 cfs Sept. 4, 1944.

REMARKS.--Records good. Flow regulated by powerplants and by Scituate Reservoir 13 miles upstream, Flat River Reservoir, and other reservoirs (combined usable capacity, about 6 billion cubic feet). Diversion above station from Scituate Reservoir for municipal supplies of Providence, North Providence, Cranston, Johnston, Smithfield, Warwick, West Warwick, and Coventry. See table below for figures of diversion and monthend contents in Scituate Reservoir and 5 smaller reservoirs, and see table with station 01116000 for monthend contents in Flat River Reservoir. Records of chemical analyses and water temperature for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 971: 1940-42. WSP 1381: 1940-41(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	109	222	236	219	428	776	353	774	785	356	185
2	109	129	176	167	215	552	472	347	588	713	293	231
3	97	126	170	324	274	1,300	657	354	546	658	251	576
4	69	129	124	305	885	1,760	662	714	376	245	258	588
5	93	124	93	351	332	1,350	681	752	456	318	190	428
6	104	104	142	293	270	1,010	659	772	370	517	138	346
7	106	78	209	270	270	885	648	584	416	539	186	232
8	106	102	183	248	262	976	626	543	445	463	247	255
9	90	129	164	244	251	1,260	604	672	420	314	210	333
10	280	136	164	354	244	1,130	586	1,110	394	350	197	249
11	151	136	129	309	244	1,010	364	965	430	308	242	246
12	114	142	95	286	229	742	333	841	364	278	171	269
13	114	114	142	270	313	590	331	590	328	307	126	220
14	111	75	147	278	462	846	455	367	340	351	169	212
15	111	116	173	255	328	937	419	780	335	313	251	216
16	88	134	176	236	301	1,010	384	1,230	328	275	230	163
17	61	116	180	236	286	1,010	363	1,220	396	249	204	121
18	73	116	124	240	278	1,030	368	931	380	221	209	162
19	102	119	88	248	495	2,050	314	781	1,010	232	179	489
20	104	102	153	248	469	1,850	381	837	1,540	242	144	580
21	109	65	170	259	347	1,520	515	992	1,410	218	193	361
22	111	93	176	240	320	1,370	702	919	1,120	179	202	362
23	90	116	180	233	301	1,710	902	812	1,160	146	195	317
24	61	111	205	240	313	1,740	868	729	1,890	213	192	269
25	93	251	248	251	309	1,530	817	669	914	444	195	257
26	111	255	161	233	305	1,270	738	624	747	754	164	225
27	121	144	176	229	301	1,080	479	528	740	436	210	220
28	116	147	180	236	320	957	405	314	650	369	225	209
29	119	205	164	222	369	867	291	351	605	268	222	212
30	95	455	192	124	-----	731	283	379	752	177	193	183
31	63	-----	289	176	-----	718	-----	530	-----	286	182	-----
TOTAL	3,274	4,178	5,195	7,841	9,440	36,419	16,483	21,590	19,424	11,168	6,416	8,716
MEAN	106	139	168	253	326	1,175	549	696	647	360	207	291
MAX	280	455	289	354	805	2,050	902	1,230	1,540	785	356	588
MIN	61	65	88	124	215	428	283	314	328	146	126	121
(†)	87.7	89.4	87.3	90.8	92.9	92.1	89.5	93.1	98.2	101	107	97.2
(‡)	4,021	3,982	4,102	4,353	4,703	5,471	5,394	5,411	5,002	4,899	4,728	4,615
MEAN††	127	222	326	438	575	1,554	613	796	585	423	230	322
CFSM††	.64	1.11	1.63	2.19	2.88	7.77	3.07	3.98	2.93	2.12	1.15	1.61
IN.††	.73	1.24	1.88	2.52	3.10	8.96	3.42	4.59	3.26	2.44	1.33	1.79

CAL YR 1971 TOTAL 86,917 MEAN 238 MAX 909 MIN 53 MEAN†† 331 CFSM†† 1.66 IN†† 22.45
WTR YR 1972 TOTAL 150,144 MEAN 410 MAX 2,050 MIN 61 MEAN†† 518 CFSM†† 2.59 IN†† 35.27

† Diversion, in cubic feet per second, from Scituate Reservoir for municipal supplies of Providence, North Providence, Cranston, Johnston, Smithfield, Warwick, West Warwick, and Coventry.

‡ Monthend contents, in millions of cubic feet, in Scituate Reservoir and 5 smaller reservoirs.

†† Adjusted for diversion and change in contents in Flat River Reservoir and in Scituate Reservoir and 5 smaller reservoirs. Records of diversion and monthend contents furnished by Providence Water Supply Board and Quinick Reservoir Co.

POTOWOMUT RIVER BASIN

01117000 Potowomut River near East Greenwich, R.I.

LOCATION.--Lat 41°38'28", long 71°26'45", Washington County, on right bank 45 ft upstream from Old Forge Dam in North Kingstown, 1.5 miles south of East Greenwich, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--23.0 sq mi.

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.42 ft above mean sea level, datum of 1929.

AVERAGE DISCHARGE.--32 years, 42.3 cfs.

EXTREMES.--Current year: Maximum discharge, 305 cfs June 19 (gage height, 2.25 ft); no flow part of Oct. 1 and 2 (due to closing of gate at Old Forge Dam).

Period of record: Maximum discharge, 866 cfs Mar. 18, 1968 (gage height, 3.36 ft), from rating curve extended above 440 cfs; minimum gage height, 6.78 ft Aug. 31, 1954 (backwater from hurricane tidal wave); no flow Oct. 25, 1947, Aug. 28-30, 1980, and part of Oct. 1 and 2, 1971. (due to closing of gate at Old Forge Dam).

Maximum stage since at least 1915, about 8.5 ft Sept. 21, 1938 (backwater from hurricane tidal wave), from information by resident of area since 1915.

REMARKS.--Records good. Diversions above station for supply of East Greenwich, North Kingstown, Warwick, and U.S. Naval establishments; see table below for figures of diversion.

REVISIONS (WATER YEARS).--WSP 1621: 1957-58.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	11	89	40	22	95	80	59	112	98	32	11
2	.40	11	52	37	22	99	75	62	110	78	29	11
3	1.7	9.3	35	57	31	147	72	67	80	63	24	89
4	1.7	9.3	27	50	145	180	73	203	65	57	26	129
5	1.2	8.2	22	69	92	135	81	168	66	51	23	57
6	2.2	8.2	21	57	57	113	76	119	60	50	22	33
7	4.3	9.3	40	44	46	94	71	94	64	45	20	24
8	3.5	8.2	37	37	36	114	66	82	61	43	18	19
9	2.8	8.2	33	37	36	137	64	95	58	41	17	18
10	19	8.2	22	82	33	105	60	148	59	37	15	15
11	40	7.2	27	72	32	87	61	116	55	35	14	13
12	17	6.2	24	57	29	83	66	93	46	32	14	14
13	12	7.2	21	48	44	88	76	83	42	39	14	14
14	8.2	7.2	19	48	88	81	107	77	41	63	15	16
15	7.2	7.2	26	44	68	112	94	139	38	47	29	17
16	5.2	9.3	29	37	54	137	72	145	36	38	22	17
17	4.3	7.2	27	33	45	197	74	114	33	18	15	15
18	3.5	7.2	24	30	41	233	67	96	115	30	15	15
19	2.8	6.2	21	33	130	166	60	87	213	28	15	42
20	3.5	8.2	21	33	194	127	75	108	229	30	14	71
21	3.5	9.3	22	37	116	111	99	165	142	29	13	43
22	4.3	11	22	36	87	127	80	122	110	28	12	42
23	5.2	14	19	35	66	193	143	96	130	25	12	35
24	6.2	12	26	35	61	148	127	83	110	29	12	27
25	12	35	42	34	57	119	106	73	95	36	12	23
26	11	52	37	30	61	104	87	66	85	144	12	21
27	8.2	31	33	26	65	95	77	64	77	70	50	20
28	8.2	33	29	26	73	89	70	61	70	45	35	18
29	7.2	33	26	24	87	85	68	58	64	35	24	19
30	6.2	146	29	25	-----	81	63	54	81	29	18	23
31	7.2	-----	48	24	-----	79	-----	53	-----	26	14	-----
TOTAL	220.50	540.3	950	1,277	1,918	3,761	2,378	3,050	2,630	1,434	618	911
MEAN	7.11	18.0	30.6	41.2	56.1	121	79.3	98.4	87.7	46.3	19.7	30.4
MAX	40	146	89	82	194	233	143	203	229	144	50	129
MIN	.40	6.2	19	24	22	79	60	53	36	25	12	11
(1)	7.06	7.07	7.17	7.28	7.27	7.57	6.70	6.84	6.95	7.73	7.69	7.01

CAL YR 1971 TOTAL 12,615.30 MEAN 34.6 MAX 236 MIN .40 (1) 7.92
WTR YR 1972 TOTAL 19,679.80 MEAN 53.8 MAX 233 MIN .40 (1) 7.20

PEAK DISCHARGE (BASE, 190 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-19	2100	2.18	279	5-4	1100	2.05	233
3-3	2130	1.99	213	6-19	1800	2.25	305
3-17	2000	2.12	257	9-3	2130	1.97	200
3-23	0300	1.98	210				

(1) Diversions, in cubic feet per second, for supply of East Greenwich, North Kingstown, Warwick, and U.S. Naval establishments; records furnished by U.S. Navy and Kent County Water Authority.

109

LOCATION. --Lat 41°26' 42", long 71°40' 53", Washington County, on right bank at downstream side of bridge on Alton-Carolina road, 0.8 mile northeast of Wood River Junction, 1.5 miles southwest of Carolina, and 2.9 miles upstream from Wood River.

PERIOD OF RECORD.--October 1940 to current year. October and November 1940 monthly discharge only, published in WSP 1301. Prior to October 1943, published as Charley River at Wood River Junction.

AVERAGE DISCHARGE.--32 years, 187 cfs (25.39 inches per year).

EXTREMES.—Current year: Maximum discharge, 929 cfs June 20 (gauge height, 6.11 ft); minimum, 31 cfs Oct. 2-6; minimum daily, 31 cfs Oct. 2-5.
Period of record: Maximum discharge, 1,700 cfs Mar. 19, 1948 (gauge height, 7.80 ft); minimum, 7.4 cfs Oct. 10, 1947; minimum daily, 13 cfs Oct. 11, 1947.

REVISIONS (WATER YEARS).--WSP 1051: Drainage area. WSP 1201: 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	52	219	150	118	389	361	298	321	426	151	86
2	31	40	219	149	119	406	347	285	344	419	147	83
3	31	64	189	152	123	447	331	280	391	409	145	132
4	31	65	158	162	187	400	318	461	374	386	172	163
5	31	63	131	191	193	532	324	570	349	352	156	171
6	34	57	121	195	197	541	315	591	315	328	145	172
7	37	57	139	181	191	511	307	548	301	304	136	143
8	37	57	146	167	169	497	295	497	317	283	134	118
9	35	58	144	158	159	499	279	465	319	270	128	106
10	61	55	139	217	149	477	263	477	307	255	124	99
11	90	54	131	245	142	444	256	480	299	342	120	93
12	92	52	126	240	135	450	259	477	271	230	116	99
13	91	57	121	234	145	430	275	445	283	230	112	89
14	66	51	117	222	182	414	354	408	239	244	110	89
15	57	51	119	205	206	459	361	437	231	254	129	89
16	52	54	126	183	214	503	357	486	221	251	128	89
17	49	54	128	153	147	544	353	507	257	234	124	84
18	48	52	121	153	180	603	329	488	315	215	118	84
19	46	52	114	158	260	660	304	449	609	202	114	95
20	44	54	112	199	423	629	299	430	889	197	108	114
21	44	55	115	162	428	577	326	463	910	192	104	120
22	43	55	114	161	459	537	327	470	851	187	101	134
23	43	45	109	158	421	554	401	456	768	179	97	129
24	43	54	110	156	375	573	446	424	683	169	97	120
25	57	92	128	154	334	559	472	389	615	163	95	112
26	55	122	139	146	330	519	454	357	565	160	93	104
27	63	131	139	136	332	478	417	327	521	165	95	104
28	60	133	131	132	343	445	378	303	480	169	97	99
29	55	126	126	125	367	418	344	287	444	163	99	97
30	52	205	126	127	-----	374	318	275	424	151	95	99
31	50	-----	145	124	-----	374	-----	267	-----	145	89	-----
TOTAL	1,550	2,138	4,202	5,266	7,081	15,321	10,170	13,087	13,192	7,574	3,678	3,313
MEAN	50.0	71.3	135.9	170.2	228.4	483.6	339.0	422.0	440.0	246.0	119.0	110.0
MAX	97	295	219	250	499	660	472	591	910	424	172	179
MIN	31	51	109	124	118	374	256	267	221	145	89	83
CFRM	50	71	1.36	1.70	2.44	4.96	3.39	4.22	4.40	2.44	1.19	1.10
1%	58	80	1.56	1.96	2.63	5.70	3.78	4.87	4.91	2.82	1.37	1.23
CAL YR 1971	TOTAL 60,318		MEAN 165		MAX 521		MIN 31		CFRM 1.65		IN 22.44	
WTR YR 1972	TOTAL 86,580		MEAN 237		MAX 910		MIN 31		CFRM 2.37		IN 32.21	

01117600 Meadow Brook near Carolina, R.I.

LOCATION.--Lat 41°27'59", long 71°41'26", Washington County, on right bank 50 ft upstream from culvert on Pine Hill Road and 1.5 miles north-west of Carolina.

DRAINAGE AREA.--5.53 sq mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 75 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 9.27 cfs (22.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 91 cfs June 19 (gage height, 4.76 ft); minimum, 0.12 cfs Oct. 1-6.

Period of record: Maximum discharge, 164 cfs Mar. 18, 1968 (gage height, 6.07 ft), from rating curve extended above 84 cfs; minimum, 0.07 cfs Sept. 12, 13, 1965, Sept. 19, 1968.

REMARKS.--Records good. Recording rain gage at station since June 1966 (no winter records).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.58	14	7.7	5.0	27	23	17	29	26	6.7	1.4
2	.12	.82	9.9	7.2	5.2	27	21	17	34	23	5.9	1.3
3	.12	1.0	6.6	8.3	5.7	32	21	18	27	19	5.2	5.9
4	.12	1.1	5.5	8.5	16	40	20	40	22	18	6.9	10
5	.12	.91	4.4	11	16	37	21	47	14	16	5.5	6.6
6	.16	.77	4.0	10	11	34	20	38	17	15	4.8	4.0
7	.20	.73	6.2	8.6	10	31	19	32	16	14	4.4	2.9
8	.22	.68	6.6	8.5	8.0	32	18	29	16	13	4.3	2.4
9	.22	.68	5.7	7.8	8.0	34	17	28	16	12	3.9	2.0
10	2.5	.64	5.2	15	7.4	30	16	32	15	11	3.7	1.7
11	3.8	.61	5.0	16	6.9	27	15	31	14	10	3.3	1.6
12	1.6	.58	4.6	14	6.5	27	16	28	13	9.5	3.2	1.4
13	.91	.50	4.3	12	8.2	24	18	25	12	11	3.0	1.4
14	.73	.52	4.0	12	15	24	24	23	11	16	2.9	1.5
15	.61	.49	4.3	11	15	35	23	33	10	14	4.5	1.5
16	.58	.52	5.0	9.6	14	42	20	39	9.8	11	3.9	1.3
17	.52	.55	4.8	7.7	11	49	19	34	16	10	3.3	1.4
18	.49	.55	4.6	7.8	10	57	18	29	25	8.9	3.0	1.2
19	.49	.52	4.1	8.2	21	47	16	26	67	8.2	2.9	2.0
20	.46	.55	4.0	8.5	40	40	17	26	76	8.5	2.6	3.5
21	.43	.52	4.3	8.8	32	35	21	32	53	8.3	2.4	3.1
22	.43	.52	4.3	8.6	28	38	20	30	45	7.8	2.1	4.4
23	.43	.52	3.7	8.5	23	47	28	26	48	6.9	1.9	3.7
24	.43	.49	4.3	8.3	21	42	31	23	39	6.6	1.9	2.8
25	1.2	2.7	6.9	8.0	20	36	29	20	33	6.1	1.8	2.5
26	1.5	4.1	5.9	7.2	20	32	24	18	30	6.7	1.8	2.2
27	1.0	3.3	6.6	5.9	23	29	23	17	27	6.3	1.9	2.0
28	.82	3.4	6.1	5.5	22	27	21	16	24	5.8	2.2	1.8
29	.68	4.0	5.5	5.5	25	26	19	15	21	5.3	2.0	1.7
30	.61	13	5.5	5.7	-----	24	18	14	22	5.2	1.7	1.7
31	.55	-----	8.0	5.5	-----	23	-----	14	-----	4.9	1.5	-----
TOTAL	22.19	45.93	174.9	276.3	453.9	1,063	618	825	805.6	744.0	105.1	80.9
MEAN	.72	1.53	5.64	8.91	15.7	34.3	20.8	26.6	26.9	11.1	3.39	2.70
MAX	3.8	13	14	16	40	57	31	48	76	26	6.9	10
MIN	.12	.49	3.7	5.5	5.0	23	15	14	9.8	4.9	1.5	1.2
CFSM	.13	.28	1.02	1.61	2.84	6.20	3.73	4.81	4.86	2.01	.61	.49
IN.	.15	.31	1.18	1.86	3.05	7.15	4.16	5.55	5.42	2.31	.71	.54

CAL YR 1971 TOTAL 2,669.70 MEAN 7.31 MAX 34 MIN .12 CFSM 1.37 IN 17.96
 WITH YR 1972 TOTAL 4,415.02 MEAN 13.2 MAX 76 MIN .12 CFSM 2.39 IN 32.39

PEAK DISCHARGE (BASE, 36 CPS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	1400	3.91	45	5-4	1400	4.03	53
3-4	0400	3.75	40	5-16	0215	3.71	39
3-18	0030	4.12	57	6-19	2145	4.76	91
3-23	2015	3.91	47				

PAWCATUCK RIVER BASIN

111

01117800 Wood River near Arcadia, R.I.

LOCATION.--Lat 41°34'26", long 71°43'16", Washington County, on left bank at upstream side of bridge on Ten Rod Road, 1.8 miles northwest of Arcadia, and 4.5 miles north of Hope Valley.

DRAINAGE AREA.--35.2 sq mi.

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 66.5 cfs (25.66 inches per year).

EXTREMES.--Current year: Maximum discharge, about 650 cfs June 20 or 21; minimum, 10 cfs Oct. 4-6.

Period of record: Maximum discharge, 896 cfs Mar. 18, 1968 (gage height, 8.64 ft); minimum, about 5.8 cfs about Sept. 8, 9, 1964.

REMARKS.--Records good. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	25	118	70	48	111	146	98	160	150		
2	11	31	101	79	48	142	139	97	190	135	53	20
3	11	33	84	92	49	332	133	101	150	123	44	19
4	11	35	73	100	127	508	131	195	130	112	44	69
5	10	32	63	119	117	390	138	193	115	103	42	87
6												62
7	12	29	58	105	107	291	133	169	110	97	41	51
8	15	30	79	92	100	239	128	145	115	89	43	42
9	14	30	66	84	81	243	121	130	115	85	46	36
10	13	29	80	80	76	265	116	133	110	78	43	31
11	58	27	73	127	70	235	111	173	105	74	39	28
12												
13	94	28	71	120	65	204	109	153	100	70	36	25
14	63	25	71	109	61	186	111	138	95	65	35	23
15	50	24	66	102	71	186	119	123	90	85	33	22
16	41	23	59	98	128	175	144	114	86	124	33	28
17	35	23	61	91	127	203	131	192	92	103	49	25
18												
19	30	24	66	79	123	212	122	212	89	89	41	24
20	28	24	64	72	107	309	123	187	130	78	37	22
21	24	24	59	70	94	466	113	162	170	70	35	21
22	23	23	54	69	117	393	106	141	300	64	33	31
23	22	24	52	69	142	304	116	145	400	72	31	49
24												
25	20	24	54	71	116	255	136	173	300	71	29	43
26	20	24	53	71	113	257	128	156	245	61	27	49
27	19	24	48	71	99	338	178	140	242	53	26	43
28	19	22	52	70	97	315	175	127	210	58	25	36
29	27	61	66	69	90	271	162	116	182	57	25	33
30												
31	30	86	64	67	89	233	142	105	163	94	24	31
32	28	72	62	59	88	205	127	100	149	67	32	29
33	26	80	58	58	88	184	115	96	133	56	31	28
34	24	80	52	55	96	171	108	92	121	50	28	26
35	22	135	48	53	-----	158	103	86	138	46	25	28
36	22	-----	66	52	-----	152	-----	86	-----	43	22	-----
TOTAL	834	1,149	2,061	2,523	2,734	7,935	3,864	4,278	4,716	2,522	1,102	1,061
MEAN	26.9	36.3	66.5	81.4	94.3	256	129	138	157	81.4	35.5	35.4
MAX	94	135	118	127	142	508	178	212	400	150	53	87
MIN	10	22	48	52	48	111	103	86	80	43	22	19
CFSM	.76	1.09	1.89	2.31	2.68	7.27	3.66	3.92	4.46	2.31	1.01	1.01
IN.	.88	1.21	2.18	2.67	2.89	8.39	4.08	4.52	4.98	2.67	1.16	1.12
CAL YR 1971	TOTAL 21,288	MEAN 58.3	MAX 219	MIN 10	CFSM 1.66	IN 22.50						
WTR YR 1972	TOTAL 34,779	MEAN 95.0	MAX 508	MIN 10	CFSM 2.70	IN 36.76						

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	0700	7.30	533	3-23	0445	5.93	347
3-18	0945	6.93	478	6-20	-	-	†650
				or 21			

NOTE.--No gage-height record Dec. 8 to Jan. 4, Jan. 6-9, 11, May 26 to June 21.

† About.

PAWCATUCK RIVER BASIN

01118000 Wood River at Hope Valley, R.I.

LOCATION.--Lat 41°29'53", long 71°43'01", Washington County, on right bank 0.2 mile downstream from highway bridge at Hope Valley and 6.6 miles upstream from mouth.

DRAINAGE AREA.--72.4 sq mi.

PERIOD OF RECORD.--August to December 1909 (gage heights only), March 1941 to current year. Records of daily discharge for August to December 1909, published in WSP 261, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 65 ft (from topographic map). August to December 1909, nonrecording gage at site 1,000 ft upstream at different datum.

AVERAGE DISCHARGE.--31 years, 147 cfs (27.57 inches per year).

EXTREMES.--Current year: Maximum discharge, 924 cfs June 20 (gage height, 6.04 ft); minimum, 24 cfs Oct. 4, 5, 8-10.
Period of record: Maximum discharge, 1,720 cfs Mar. 18, 1968 (gage height, 8.26 ft), from rating curve extended above 970 cfs; minimum, 4.4 cfs Oct. 18, 1941; minimum daily, 10 cfs Oct. 13, 1941.
Maximum stage since 1711, at least 12.4 ft in February 1886. Flood of November 1927 reached a stage of 11.7 ft, and flood of March 1936 reached a discharge of 1,540 cfs.

REMARKS.--Records excellent. Some seasonal regulation by Locustville Pond on Brushy Brook since 1968. Some regulation at low flow by mills and ponds above station until 1952; regulation greater prior to 1948.

REVISIONS (WATER YEARS).--WSP 1201: 1948(P). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	40	271	144	94	237	260	192	324	326	109	44
2	25	54	208	139	97	285	247	189	384	285	107	42
3	25	64	169	187	103	500	236	196	302	247	96	116
4	24	67	154	195	221	899	234	410	249	227	101	249
5	27	68	135	225	230	778	245	429	225	206	91	152
6	35	63	127	214	197	564	241	340	210	196	82	105
7	33	50	158	186	181	414	230	289	217	183	80	84
8	20	52	174	169	152	408	219	258	223	173	84	71
9	24	51	160	162	145	436	210	258	213	162	79	62
10	43	40	147	251	134	403	200	348	204	150	74	56
11	170	47	144	257	127	355	188	315	196	143	66	50
12	128	45	144	221	119	326	200	274	181	135	63	47
13	83	44	132	199	139	344	208	243	171	156	63	46
14	68	43	120	193	232	318	276	225	162	274	62	53
15	58	42	124	180	241	377	252	359	156	230	87	53
16	51	46	134	161	220	410	227	467	147	187	89	48
17	45	47	129	138	195	567	234	377	269	162	74	45
18	40	46	119	140	176	864	221	318	326	143	68	44
19	37	44	108	138	265	780	204	278	617	131	65	55
20	35	46	105	137	388	584	213	278	866	143	60	85
21	33	46	109	141	284	465	265	357	667	143	56	87
22	32	46	107	139	265	461	245	322	549	133	53	91
23	32	55	96	135	214	631	337	276	531	114	51	87
24	31	70	104	134	210	584	364	247	461	118	51	71
25	41	104	134	131	194	485	324	223	392	112	55	63
26	61	170	130	126	197	410	280	202	344	166	51	59
27	57	152	124	114	198	362	249	192	298	154	59	55
28	50	143	117	113	196	329	227	185	278	119	63	51
29	45	151	105	106	210	302	213	177	263	103	56	48
30	41	275	97	106	-----	282	200	166	274	94	50	51
31	38	-----	133	102	-----	269	-----	166	-----	91	46	-----
TOTAL	1,466	2,229	4,220	4,983	5,635	14,409	7,259	8,556	9,699	5,205	2,191	2,170
MEAN	47.3	74.3	136	161	194	465	242	276	323	168	70.7	72.3
MAX	170	275	271	257	388	899	364	467	866	326	109	249
MIN	24	40	96	102	94	237	198	166	147	91	46	42
CFSM	.65	1.03	1.88	2.22	2.68	6.42	3.34	3.81	4.46	2.32	.98	1.00
IN.	.75	1.15	2.17	2.56	2.90	7.40	3.73	4.40	4.98	2.67	1.13	1.11

CAL YR 1971 TOTAL 44,425 MEAN 122 MAX 460 MIN 24 CFSM 1.69 IN 22.83
WTR YR 1972 TOTAL 68,022 MEAN 186 MAX 899 MIN 24 CFSM 2.57 IN 34.95

PEAK DISCHARGE (BASE, 550 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	0930	6.03	922				
3-18	1300	5.93	895				
6-20	0530	6.04	924				

PAWCATUCK RIVER BASIN

113

01118500 Pawcatuck River at Westerly, R.I.

LOCATION.--Lat 41°23'01", long 71°50'01", Washington County, on left bank at Westerly, 2.1 miles downstream from Shunock River.

DRAINAGE AREA.--295 sq mi.

PERIOD OF RECORD.--November 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.76 ft below mean sea level, datum of 1929.

AVERAGE DISCHARGE.--32 years, 554 cfs (25.50 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 3,280 cfs June 20 (gage height, 8.66 ft); minimum daily, 88 cfs Oct. 4, 5.
 Period of record: Maximum discharge, 4,470 cfs Mar. 18, 1968 (gage height, 10.49 ft); maximum gage height, 12.16 ft Aug. 31, 1954 (backwater from tide); minimum daily discharge, 25 cfs Aug. 17, 1941.
 Flood of March 1936 reached a discharge of 3,150 cfs, by computation of flow over dam 1.5 miles upstream from station. Maximum discharge since 1886 occurred in November 1927 and was possibly more than twice that of March 1936. Maximum stage since at least 1635, 15.0 ft Sept. 21, 1938 (due to hurricane tidal wave).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diurnal fluctuation at low flow prior to 1962 by mills above station; regulation much greater prior to 1958. Diversion above station for municipal supply of Westerly.

REVISIONS.--WSP 1051: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	172	1,010	550	412	1,070	1,000	778	902	1,160	359	201
2	91	192	860	580	424	1,100	572	748	1,180	1,110	364	192
3	91	217	702	660	430	1,330	909	755	1,150	1,010	348	302
4	49	245	607	700	655	1,780	881	1,380	1,020	937	450	456
5	88	245	530	800	762	1,950	909	1,700	937	860	406	443
6	91	240	500	780	658	1,950	902	1,640	852	785	348	376
7	104	240	600	740	600	1,740	860	1,450	785	725	320	320
8	104	231	640	680	537	1,600	830	1,330	770	672	314	268
9	102	226	620	640	502	1,600	778	1,230	770	628	309	240
10	143	222	580	900	469	1,540	732	1,340	748	586	294	231
11	268	226	550	930	456	1,420	710	1,320	718	551	273	213
12	273	222	540	868	430	1,310	718	1,240	672	509	256	196
13	235	222	510	800	462	1,320	770	1,150	621	516	254	192
14	156	222	480	748	680	1,290	1,040	1,040	593	718	256	196
15	180	222	490	680	740	1,460	1,060	1,190	572	748	331	205
16	165	231	520	600	710	1,670	986	1,450	551	680	325	201
17	161	235	510	530	658	1,910	951	1,480	658	593	299	192
18	146	240	480	530	607	2,300	909	1,340	530	530	283	192
19	146	235	450	530	888	2,230	845	1,230	2,130	495	268	201
20	139	240	440	537	1,470	2,120	815	1,170	3,170	530	258	245
21	139	245	450	551	1,220	1,320	944	1,300	2,870	530	245	234
22	139	245	440	551	1,240	1,800	951	1,310	2,630	488	235	288
23	135	245	420	551	1,080	1,940	1,170	1,200	2,540	450	226	299
24	143	249	430	537	1,010	1,900	1,340	1,080	2,260	418	222	268
25	139	336	520	537	937	1,780	1,360	965	1,980	406	217	245
26	205	537	540	523	505	1,630	1,270	888	1,740	388	217	235
27	201	551	530	495	958	1,470	1,140	815	1,520	406	217	226
28	196	509	490	476	972	1,300	1,030	762	1,320	400	226	217
29	188	509	460	450	1,010	1,190	523	725	1,170	376	222	213
30	184	579	450	450	-----	1,100	845	688	1,110	353	213	217
31	180	-----	500	436	-----	1,040	-----	665	-----	336	205	-----
TOTAL	4,758	8,930	16,849	19,400	21,926	49,780	28,550	35,419	38,865	18,894	8,764	7,524
MEAN	153	290	544	626	756	1,606	952	1,143	1,296	609	283	251
MAX	273	979	1,010	930	1,470	2,300	1,360	1,700	3,170	1,160	450	456
MIN	88	172	420	436	412	1,040	710	665	551	336	205	192
MEAN†	157	301	547	629	759	1,609	955	1,146	1,299	614	288	255
CFSM†	.53	1.02	1.85	2.13	2.57	5.45	3.24	3.88	4.40	2.08	.98	.86
IN.†	.61	1.14	2.14	2.46	2.78	6.29	3.61	4.48	4.92	2.40	1.12	.96
CAL YR 1971	TOTAL 167,415	MEAN 459	MAX 1,480	PIA 88	MEAN† 463	CFSM† 1.57	IN† 21.29					
WTR YR 1972	TOTAL 259,663	MEAN 709	MAX 3,170	PIA 88	MEAN† 713	CFSM† 2.42	IN† 32.91					

† Adjusted for diversion for municipal supply of Westerly. Diversion records furnished by Westerly Department of Public Works.
 NOTE.--No gage-height record Dec. 5 to Jan. 10.

THAMES RIVER BASIN

01123600 Quinebaug River below Westville Dam, near Southbridge, Mass.

LOCATION.--Lat 42°04'58", long 72°03'27", Worcester County, on right bank 200 ft downstream from Westville Dam, 1 mile upstream from McKinstry Brook, and 1.3 miles west of Southbridge.

DRAINAGE AREA.--99.1 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 510 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 146 cfs (20.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,160 cfs Mar. 29 (gage height, 6.21 ft); minimum daily, 19 cfs Oct. 4.
Period of record: Maximum discharge, 1,160 cfs Mar. 29, 1972 (gage height, 6.21 ft); minimum daily, 7.3 cfs Nov. 21, 28, 1964, July 30, 1965.

REMARKS.--Records good. Flow regulated by mills, by East Brimfield and Westville Lakes (see p. 121), and by other reservoirs above station.

DISCHARGE. IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	31	316	179	124	174	592	262	560	263	46	21
2	21	48	277	176	116	219	677	249	798	260	46	20
3	20	61	193	228	119	158	624	258	757	244	46	39
4	19	68	166	236	252	151	520	414	616	269	46	50
5	75	61	152	256	245	353	400	446	526	249	45	44
6	67	55	134	242	223	550	343	421	504	238	44	42
7	30	63	217	221	206	654	322	373	457	216	44	37
8	28	72	277	198	177	678	298	337	398	192	44	33
9	28	77	303	181	158	755	285	398	367	284	46	30
10	62	87	303	272	145	762	114	421	463	196	48	26
11	119	82	311	307	132	729	113	400	463	185	47	23
12	138	64	310	333	121	672	134	366	419	165	46	20
13	148	60	299	332	115	710	368	328	365	154	44	20
14	170	54	269	343	147	833	514	294	320	170	45	23
15	147	47	257	315	296	422	491	379	287	155	52	29
16	145	50	266	270	374	235	378	456	263	146	52	28
17	141	52	260	221	407	122	374	461	307	130	50	29
18	135	52	248	192	385	352	350	449	304	61	49	28
19	129	59	224	181	339	669	326	437	316	33	47	61
20	122	63	201	179	265	845	371	424	318	44	42	89
21	114	65	186	183	220	933	456	470	293	190	37	80
22	90	71	174	178	204	623	436	441	287	250	33	79
23	60	73	153	175	184	328	509	394	311	123	30	68
24	46	72	160	196	184	720	530	346	315	53	27	56
25	47	81	209	219	172	840	409	299	322	97	28	47
26	46	91	214	215	170	861	441	262	320	82	25	45
27	44	94	215	193	174	977	385	232	311	67	23	44
28	41	116	212	172	142	1,040	340	216	278	56	29	34
29	38	164	202	155	158	1,040	309	198	249	50	27	30
30	34	272	196	143	-----	961	281	175	243	47	24	42
31	31	-----	195	134	-----	708	-----	201	-----	46	22	-----
TOTAL	2,356	2,305	7,099	6,825	5,974	19,074	11,700	10,805	11,737	4,635	1,234	1,217
MEAN	76.0	76.8	229	220	206	615	390	349	391	150	39.8	40.6
MAX	170	272	316	343	407	1,040	677	470	798	269	52	89
MIN	19	31	134	134	115	122	113	175	243	33	22	20
MEAN†	79.1	78.5	229	219	207	657	349	347	393	145	38.6	41.2
CFSM†	.80	.79	2.31	2.21	2.09	6.63	3.52	3.50	3.97	1.46	.39	.42
IN.†	.92	.88	2.66	2.55	2.25	7.64	3.93	4.04	4.42	1.69	.45	.46
CAL YR 1971 TOTAL	49,667.2											
MEAN	136											
MAX	463											
MIN	8.3											
MEAN†	139											
CFSM†	1.40											
IN†	19.02											
WTR YR 1972 TOTAL	84,961.0											
MEAN	232											
MAX	1,040											
MIN	19											
MEAN†	232											
CFSM†	2.34											
IN†	31.90											

† Adjusted for change in contents in East Brimfield and Westville Lakes.

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

THAMES RIVER BASIN

115

01124000 Quinebaug River at Quinebaug, Conn.

LOCATION.--Lat 42°01'20", long 71°57'22", Windham County, on right bank at Quinebaug, 500 ft upstream from bridge on State Highway 197, 0.2 mile downstream from Massachusetts-Connecticut State line, 7.8 miles upstream from French River, and at mile 46.

DRAINAGE AREA.--156 sq mi (revised).

PERIOD OF RECORD.--September 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 341.52 ft above mean sea level.

AVERAGE DISCHARGE.--41 years, 264 cfs (22.99 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,070 cfs Mar. 3 (gage height, 5.54 ft); minimum, 22 cfs Oct. 4, 5 (gage height, 2.23 ft).
Period of record: Maximum discharge, 49,300 cfs Aug. 19, 1955 (gage height, 18.96 ft, from floodmarks), from rating curve extended above 5,100 cfs on basis of slope-area measurement of peak flow; minimum, about 1 cfs Sept. 9, 1943, July 12, 1949, Sept. 17, 18, 1950, July 9, 1951, Sept. 4, Oct. 29, 1956; minimum daily, about 1 cfs Sept. 4, 1956; minimum gage height, 1.74 ft Aug. 20, 1940.

REMARKS.--Records good. Flow regulated by East Brimfield and Westville Lakes (see p. 121), and by smaller reservoirs upstream. Records of chemical analyses and water temperatures for the current year are published as Quinebaug River near Dudley, Mass., in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	26	49	575	261	169	296	715	350	1,000	381	69	28		
2	24	123	446	282	154	386	856	340	1,060	349	61	27		
3	23	145	338	397	159	1,580	780	423	917	319	56	102		
4	22	150	279	381	534	1,010	691	871	763	353	58	93		
5	70	130	257	420	409	885	567	780	781	327	50	74		
6	98	109	228	367	343	936	498	670	693	314	43	64		
7	50	116	454	330	284	979	465	567	596	277	41	55		
8	33	133	509	288	256	1,210	420	524	517	246	59	46		
9	32	127	503	281	233	1,210	345	687	501	279	67	41		
10	151	134	502	517	209	1,090	228	671	767	250	67	36		
11	244	131	556	529	198	986	233	598	683	228	57	30		
12	235	111	535	544	175	917	229	530	565	203	48	28		
13	211	99	482	516	291	939	486	461	481	204	45	32		
14	221	84	422	554	484	1,050	709	406	410	227	48	42		
15	191	74	412	475	515	674	676	687	363	197	71	46		
16	178	90	444	376	557	558	537	740	336	179	56	43		
17	170	87	417	340	553	1,180	571	672	435	160	55	43		
18	161	84	375	268	505	1,730	528	616	414	123	59	42		
19	151	83	327	261	462	1,390	474	582	459	162	57	126		
20	143	94	295	257	503	1,270	614	587	463	202	50	155		
21	134	94	279	261	324	1,230	744	657	418	192	44	133		
22	116	101	262	250	300	1,440	656	591	416	345	38	126		
23	81	107	228	247	280	1,320	845	527	469	161	35	106		
24	60	102	258	296	265	1,320	839	452	457	111	31	88		
25	78	119	345	335	249	1,240	743	383	437	170	31	74		
26	70	130	330	300	252	1,150	636	338	427	160	31	64		
27	64	128	321	271	254	1,180	555	304	427	121	29	71		
28	60	207	321	228	239	1,270	487	279	368	88	40	53		
29	55	278	302	208	245	1,200	423	254	322	77	34	45		
30	50	623	290	192	-----	1,120	377	225	343	65	31	51		
31	46	-----	287	184	-----	915	-----	309	-----	57	29	-----		
TOTAL	3,248	4,042	11,579	10,416	9,296	33,661	16,937	16,081	16,288	6,527	1,490	1,964		
MEAN	105	135	374	336	321	1,086	565	519	543	211	48.1	65.5		
MAX	244	623	575	554	557	1,730	866	871	1,060	381	71	155		
MIN	22	49	228	184	154	296	228	225	322	57	29	27		
MEAN†	108	137	374	335	322	1,126	524	518	543	207	46.9	66.2		
CFSMT	.69	.88	2.40	2.15	2.06	7.22	3.36	3.32	3.48	1.33	.30	.42		
IN.†	.80	.98	2.77	2.48	2.22	8.32	3.75	3.83	3.88	1.53	.35	.47		
CAL YR 1971	TOTAL	78,038	MEAN	214	MAX	780	MIN	11	MEAN†	217	CFSMT	1.39	INT	18.87
4TR YR 1972	TOTAL	131,529	MEAN	359	MAX	1,730	MIN	22	MEAN†	359	CFSMT	2.30	INT	31.31

† Adjusted for change in contents in East Brimfield and Westville Lakes.

THAMES RIVER BASIN

01124350 French River below Hodges Village Dam, at Hodges Village, Mass.

LOCATION.--Lat 42°07'06", long 71°52'54", Worcester County, on right bank at Hodges Village, 240 ft downstream from Hodges Village Dam, 0.8 mile west of Oxford, and 1.2 miles upstream from Little River.

DRAINAGE AREA.--31.0 sq mi.

PERIOD OF RECORD.--March 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 480 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 47.2 cfs (20.68 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 496 cfs Mar. 20 (gage height, 3.19 ft); minimum, 9.0 cfs Aug. 21, 22; minimum daily, 9.0 cfs Aug. 22. Period of record: Maximum discharge, 496 cfs Mar. 20, 1972 (gage height, 3.19 ft); maximum gage height, 3.24 ft Mar. 28, 1963; no flow July 17, 1968 (caused by unusual regulation); minimum daily discharge, 2.0 cfs Aug. 7, 1963.

REMARKS.--Records good. Flow regulated by Hodges Village Reservoir (see p. 121).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	120	54	54	90	152	71	134	77	16	15
2	17	27	96	54	54	102	147	68	239	75	16	15
3	16	40	69	82	54	120	152	73	189	64	15	25
4	16	40	63	89	92	170	147	223	119	73	15	51
5	16	35	36	89	104	220	141	297	192	83	15	35
6	19	30	34	82	86	278	126	219	345	79	15	24
7	23	30	60	72	80	355	97	147	289	67	12	21
8	20	40	96	64	69	294	90	119	190	55	14	18
9	17	38	95	56	65	297	84	142	128	61	15	17
10	31	33	86	93	61	359	79	177	172	63	17	17
11	75	26	105	130	58	311	58	161	281	52	12	17
12	59	23	114	131	54	251	58	132	247	44	9.9	16
13	40	20	111	120	61	191	62	107	145	39	9.3	15
14	33	19	90	126	165	176	108	87	109	48	9.3	17
15	28	17	79	136	209	162	117	114	92	48	19	25
16	20	19	81	109	162	154	100	187	80	40	23	23
17	16	19	93	80	130	196	106	180	41	34	16	19
18	14	19	92	74	105	265	124	144	95	31	13	17
19	14	18	60	66	87	378	114	120	88	30	12	24
20	13	17	57	70	71	437	109	105	94	29	11	48
21	13	17	55	70	76	415	165	130	112	47	9.6	33
22	12	19	52	70	87	239	159	136	109	52	9.0	27
23	11	23	48	69	78	167	165	110	164	43	13	23
24	11	21	58	75	74	351	209	92	182	36	16	20
25	13	21	61	86	75	366	192	77	125	31	18	19
26	17	26	68	90	74	340	149	66	89	33	19	17
27	17	23	66	77	73	343	116	59	65	35	18	16
28	15	33	63	71	70	325	98	54	66	27	20	18
29	14	45	63	64	73	275	87	47	60	22	21	25
30	14	91	60	63	-----	298	78	44	58	19	18	29
31	14	-----	58	59	-----	176	-----	43	-----	16	17	-----
TOTAL	656	846	2,301	2,581	2,505	8,017	3,599	3,735	4,359	1,451	463.1	678
MEAN	21.2	26.2	74.2	83.3	86.4	259	120	120	145	46.8	14.9	22.6
MAX	75	91	128	136	209	437	209	297	345	83	23	51
MIN	11	17	34	54	54	80	58	43	58	16	9.0	15
CFSMT	.68	.92	2.39	2.69	2.79	8.39	3.84	3.87	4.68	1.50	.48	22.6
IN.†	.79	1.03	2.76	3.10	3.01	9.66	4.27	4.47	5.23	1.74	.56	.81
CAL YR 1971	TOTAL 17,745.8	MEAN 48.6	MAX 254	MIN 6.6	MEAN† 48.6	CFSMT 1.57	IN† 21.29					
WTR YR 1972	TOTAL 31,181.1	MEAN 85.2	MAX 437	MIN 9.0	MEAN† 85.2	CFSMT 2.75	IN† 37.41					

† Adjusted for change in contents in Hodges Village Reservoir.

THAMES RIVER BASIN

117

01124500 Little River at Buffumville, Mass.

LOCATION.--Lat 42°06'57", long 71°53'26", Worcester County, on left bank 0.6 mile upstream from mouth, 0.8 mile east of Buffumville, 1.1 miles downstream from Buffumville Dam, and 1.5 miles west of Oxford.

DRAINAGE AREA.--27.7 sq mi.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 457.00 ft above mean sea level, unadjusted (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years, 45.9 cfs (22.50 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 321 cfs Mar. 28 (gage height, 4.63 ft); minimum, 3.8 cfs Oct. 5, 6, Sept. 1, 2.
Period of record: Maximum discharge, 8,340 cfs Aug. 19, 1955 (gage height, 15.53 ft), from rating curve extended above 1,200 cfs on basis of computation of peak flow over dam; minimum, 0.1 cfs Sept. 25, 26, 1957. Maximum discharge since construction of Buffumville Dam in 1958, 429 cfs Apr. 7, 1959 (gage height, 5.04 ft).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Buffumville Lake since 1958 (see p. 121) and occasionally by other reservoirs upstream. Prior to 1958, flow regulated by mill above station.

REVISIONS (WATER YEARS).--WSP 1201: 1940, 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	13	115	55	35	47	214	70	105	68	15	4.0
2	4.9	14	112	52	33	57	206	65	100	70	15	3.8
3	4.6	26	40	64	34	141	220	75	163	58	14	10
4	4.2	27	71	76	53	127	174	177	121	58	14	12
5	4.0	26	55	84	72	150	134	226	129	58	13	12
6	5.4	23	47	82	74	207	116	191	147	56	12	11
7	7.6	24	55	73	69	270	104	151	134	54	11	9.8
8	7.3	26	77	63	62	254	98	127	109	50	13	8.5
9	7.1	26	88	55	59	259	86	143	96	55	14	7.8
10	15	24	88	69	56	275	80	146	124	56	16	6.9
11	33	23	91	93	54	241	74	152	152	47	11	6.2
12	34	21	112	108	53	165	74	132	139	40	9.7	5.7
13	36	20	115	108	53	131	79	112	112	35	9.0	5.7
14	30	18	102	110	77	117	102	93	89	41	9.0	6.3
15	26	17	93	108	109	137	115	115	72	43	11	6.2
16	23	17	88	93	111	129	110	154	62	36	11	6.1
17	19	17	90	74	98	148	111	155	68	31	10	5.9
18	17	17	86	59	80	117	115	136	78	28	9.9	5.6
19	15	17	77	50	78	169	109	116	82	27	9.3	11
20	13	17	65	47	72	224	111	106	97	34	8.6	12
21	12	17	59	48	65	247	136	119	94	45	7.9	13
22	10	19	52	47	57	203	140	122	89	45	7.3	13
23	9.2	19	47	46	54	112	151	110	97	37	6.8	12
24	8.8	19	47	51	52	249	167	93	105	32	6.8	11
25	12	24	57	59	46	265	159	77	101	30	6.7	10
26	13	27	64	65	47	260	138	64	93	40	6.3	9.5
27	14	27	64	60	46	262	116	56	70	35	6.0	8.7
28	14	31	61	53	44	273	100	50	58	26	5.4	7.6
29	14	38	60	46	43	274	87	45	54	20	4.7	7.0
30	13	40	59	41	-----	270	77	41	52	17	5.5	7.8
31	12	59	38	-----	-----	254	-----	45	-----	15	4.6	-----
TOTAL	450.6	719	2,350	2,076	1,786	6,054	3,703	3,478	3,052	1,287	303.5	256.1
MEAN	14.5	24.0	75.8	67.0	61.6	195	123	112	102	41.5	9.79	8.54
MAX	39	40	115	110	111	278	220	226	163	70	16	13
MIN	4.0	13	47	38	33	47	74	41	52	15	4.6	3.8
MEAN†	15.2	26.3	75.3	66.3	61.9	212	107	111	102	39.9	8.82	8.05
CFSMT	.55	.95	2.73	2.39	2.23	7.65	3.86	4.01	3.68	1.44	.32	.32
INT†	.63	1.06	3.14	2.76	2.41	8.82	4.33	4.62	4.13	1.66	.37	.36
CAL YR 1971 TOTAL	14,505.9											
WTR YR 1972 TOTAL	25,515.2											
MEAN 39.7												
MAX 180												
MIN 1.8												
MEAN† 40.0												
MEAN† 69.7												
CFSMT 1.44												
CFSMT 2.52												
INT 19.59												
INT 34.28												

† Adjusted for change in contents in Buffumville Lake.

NOTE.--No gage-height record June 27 to Aug. 14.

THAMES RIVER BASIN

01124750 Browns Brook near Webster, Mass.

LOCATION.--Lat 42°03'24", long 71°49'51", Worcester County, on left bank 15 ft downstream from culvert on State Highway 16 and 1.8 miles east of Webster.

DRAINAGE AREA.--0.49 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 1.02 cfs (28.27 inches per year).

EXTREMES.--Current year: Maximum discharge, 19 cfs Mar. 3 (gage height, 2.02 ft); minimum, 0.03 cfs Oct. 1-5.

Period of record: Maximum discharge, 125 cfs Mar. 18, 1968 (gage height, 2.46 ft); no flow for many days during water years 1963-65, 1968-71.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Recording rain gage at station since April 1963 (no winter records). Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.21	4.9	1.2	.74	.88	1.2	1.0	3.8	2.5	.35	.05
2	.03	1.3	4.3	1.5	.74	1.2	1.2	1.0	2.8	1.9	.30	.05
3	.03	.74	4.3	2.1	.64	13	1.0	1.7	2.4	1.7	.24	.47
4	.03	.64	4.3	1.8	1.9	11	.79	6.6	2.4	1.5	.22	.35
5	.03	.64	3.8	1.9	1.3	6.6	.74	3.8	2.8	1.4	.18	.19
6	.04	.56	3.5	1.9	1.2	3.5	.74	3.0	2.2	1.3	.15	.11
7	.05	.74	5.2	1.6	1.2	2.8	.72	2.6	2.2	1.2	.24	.09
8	.04	.74	3.0	1.6	1.0	4.0	.64	2.2	1.9	1.1	.25	.07
9	.04	.74	2.6	1.6	1.0	3.3	.64	2.6	2.1	1.2	.21	.08
10	.49	.74	2.6	2.4	.88	2.6	.62	2.8	3.5	1.1	.15	.09
11	.37	.74	3.3	2.4	.88	2.2	.49	2.2	2.6	.90	.12	.07
12	.16	.74	3.0	2.4	.74	2.1	.49	1.9	2.6	.80	.11	.07
13	.12	.74	2.6	2.2	1.3	1.9	.64	1.9	2.6	.99	.10	.06
14	.10	.74	2.4	2.2	2.4	1.9	.82	1.8	2.2	1.4	.11	.09
15	.10	.74	2.4	2.1	1.9	1.5	.70	2.6	2.1	1.0	.13	.13
16	.10	.74	2.4	1.9	1.9	1.5	.64	2.4	1.9	.80	.15	.09
17	.10	.74	2.2	1.8	1.8	6.9	.74	2.2	2.2	.60	.15	.06
18	.10	.74	2.2	1.8	1.8	11	.74	1.9	2.2	.45	.15	.06
19	.08	.74	1.9	1.5	1.9	8.5	.64	1.8	2.4	.70	.15	.47
20	.08	.74	1.8	1.5	1.6	4.2	1.2	1.8	2.6	1.0	.13	.40
21	.10	.74	1.8	1.5	1.5	3.1	1.6	1.9	2.2	.70	.11	.21
22	.12	.74	1.6	1.2	1.5	5.8	1.5	1.6	2.6	.50	.09	.18
23	.12	.98	1.5	1.0	1.0	10	2.5	1.5	3.5	.40	.09	.13
24	.14	.88	1.6	1.0	1.0	5.8	2.4	1.3	3.0	.35	.11	.13
25	.24	.88	1.8	1.0	1.0	3.4	2.2	1.3	3.0	.60	.24	.13
26	.27	.88	1.6	1.0	.88	2.8	1.8	1.2	2.6	.80	.13	.11
27	.24	.88	1.6	.88	.74	2.2	1.8	1.2	2.7	.60	.11	.11
28	.24	2.1	1.5	.88	.74	1.9	1.5	.88	2.3	.43	.11	.11
29	.19	2.6	1.5	.88	.74	1.6	1.5	.74	1.9	.34	.09	.09
30	.19	4.9	1.3	.88	-----	1.6	1.3	.64	2.3	.27	.07	.09
31	.19	-----	1.3	.74	-----	1.5	-----	1.2	-----	.23	.05	-----
TOTAL	4.16	29.93	79.8	48.36	35.92	130.28	33.49	61.26	75.6	28.76	4.79	4.33
MEAN	.13	1.00	2.57	1.56	1.24	4.20	1.12	1.98	2.52	.93	.15	.14
MAX	.49	4.9	5.2	2.4	2.4	13	2.5	6.6	3.8	2.5	.35	.47
MIN	.03	.21	1.3	.74	.64	.88	.49	.64	1.9	.23	.05	.05
CFSM	.27	2.04	5.24	3.18	2.53	8.57	2.29	4.04	5.14	1.90	.31	.29
IN.	.32	2.27	6.06	3.67	2.73	9.89	2.54	4.65	5.74	2.18	.36	.33
CAL YR 1971	TOTAL 323.86 MEAN .89 MAX 5.2 MIN 0 CFSM 1.82 IN 24.59											
WTR YR 1972	TOTAL 536.68 MEAN 1.47 MAX 13 MIN .03 CFSM 3.00 IN 40.74											

PEAK DISCHARGE (BASE, 5.0 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	2315	1.85	5.7	3-17	1800	1.91	11
12-7	1230	1.85	6.2	3-22	1815	1.92	11
3-3	0930	2.02	19	5-3	2330	1.87	8.6
3-8	1215	1.83	6.6				

NOTE.--No gage-height record July 5 to Aug. 14.

THAMES RIVER BASIN

119

01125000 French River at Webster, Mass.

LOCATION.--Lat 42°03'03", long 71°53'08", Worcester County, on right bank in Dudley, 50 ft upstream from Pleasant Street Bridge at Webster, and 1.1 miles upstream from Potash Brook.

DRAINAGE AREA.--85.3 sq mi.

PERIOD OF RECORD.--December 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 406.74 ft above mean sea level.

AVERAGE DISCHARGE.--23 years (1949-72), 153 cfs (24.36 inches per year), adjusted for storage in flood-control reservoirs.

EXTREMES.--Current year: Maximum discharge, 932 cfs Mar. 22 (gage height, 7.83 ft); minimum daily, 25 cfs Oct. 5.
Period of record: Maximum discharge, 14,400 cfs Aug. 19, 1955 (gage height, 26.05 ft, from floodmarks), from rating curve extended above 2,400 cfs on basis of computation of peak flow over dam; minimum daily, 2.2 cfs Aug. 15, 1965. Maximum discharge since construction of Buffumville Dam in 1958, 1,020 cfs Apr. 2, 1960 (gage height, 7.56 ft); maximum gage height, 7.92 ft Mar. 21, 1968.
Flood of Mar. 19, 1936, reached a discharge of 4,700 cfs, by computation of flow over dam about 0.5 mile upstream.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by mills, by Lake Chaubunagungamaug (estimated usable capacity, 207,000,000 cu ft), by Buffumville Lake and Hodges Village Reservoir (see p. 121), and by smaller reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1721: 1959 (adjusted monthly and yearly figures only). WRD Mass., N.H., R.I., Vt. 1969: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	40	269	167	132	202	568	240	328	205	69	38
2	32	84	265	169	130	226	535	234	511	205	63	37
3	31	103	213	193	132	651	526	266	512	194	57	50
4	29	105	178	216	206	596	512	525	402	190	57	100
5	25	96	144	226	230	560	421	734	414	191	52	90
6	27	82	126	219	209	563	359	658	575	192	50	70
7	48	88	167	199	196	729	315	526	568	185	50	58
8	40	92	199	181	181	817	280	440	461	169	57	48
9	34	96	219	172	167	705	258	478	362	190	54	45
10	97	88	216	213	154	761	244	535	424	191	59	43
11	149	81	230	269	142	717	233	520	542	184	54	41
12	154	73	262	308	134	594	219	457	549	161	49	40
13	124	65	280	301	167	490	230	384	462	147	45	40
14	99	54	258	301	294	433	265	314	364	151	46	42
15	84	49	226	312	391	427	300	381	290	154	53	50
16	70	60	213	273	369	430	291	495	256	138	61	52
17	49	56	219	226	305	608	288	525	265	123	56	46
18	40	53	226	199	255	723	295	470	272	111	52	43
19	40	51	196	181	244	714	292	397	291	125	46	55
20	37	53	178	178	230	799	305	359	296	141	41	80
21	34	51	172	178	220	866	362	381	318	129	37	74
22	33	58	167	175	219	852	404	406	326	146	35	66
23	33	65	157	169	206	591	432	362	375	134	38	60
24	29	63	164	184	199	778	516	308	431	117	41	52
25	33	73	178	202	193	859	523	260	357	118	44	48
26	37	79	181	209	196	820	441	223	295	126	44	45
27	45	77	184	196	190	789	359	208	254	113	43	44
28	45	107	184	178	187	792	304	198	237	102	45	44
29	40	136	178	164	187	757	271	184	228	90	47	50
30	37	202	178	154	-----	699	253	166	213	73	44	60
31	34	-----	175	142	-----	648	-----	176	-----	65	40	-----
TOTAL	1,642	2,380	6,202	6,454	6,065	20,196	10,601	11,810	11,178	4,560	1,529	1,611
MEAN	53.0	79.3	200	208	209	651	353	381	373	147	49.3	53.7
MAX	154	202	280	312	391	866	568	734	575	205	69	100
MIN	25	40	126	142	130	202	219	166	213	65	35	37
MEAN†	53.6	82.0	200	208	210	669	336	379	373	145	48.4	54.0
CFSM†	.63	.96	2.34	2.44	2.46	7.84	3.94	4.44	4.37	1.70	.57	.63
IN.†	.72	1.07	2.70	2.81	2.65	9.05	4.40	5.13	4.88	1.97	.65	.71
CAL YR 1971	TOTAL 49,139	MEAN 135	MAX 594	MIN 19	MEAN† 135	CFSM† 1.58	IN† 21.47					
WTR YR 1972	TOTAL 84,228	MEAN 230	MAX 866	MIN 25	MEAN† 230	CFSM† 2.70	IN† 36.74					

† Adjusted for change in contents in Buffumville Lake and Hodges Village Reservoir.

NOTE.--No gage-height record Aug. 18 to Sept. 30. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

THAMES RIVER BASIN

01126200 Bucks Horn Brook at Greene, R.I.

LOCATION.--Lat 41°41'35", long 71°44'38", Kent County, on left bank 35 ft upstream from culvert on State Highway 117 at Greene and 0.5 mile upstream from Warwick Brook.

DRAINAGE AREA.--5.52 sq. mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 410 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 10.5 cfs (25.83 inches per year).

EXTREMES.--Current year: Maximum discharge, 258 cfs Mar. 3 (gage height, 4.79 ft), from rating curve extended above 79 cfs on basis of measurement of peak flow through culvert at gage height 5.49 ft; minimum, 0.48 cfs Oct. 1-6.
 Period of record: Maximum discharge, 353 cfs Mar. 18, 1968 (gage height, 5.49 ft), from rating curve extended above 79 cfs on basis of measurement of peak flow through culvert; minimum, 0.27 cfs Aug. 17-19, Sept. 10-13, 1965.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Recording rain gage at station since June 1966 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.2	21	12	5.7	18	18	13	4.0	22	6.6	1.4
2	4.4	6.0	11	12	5.3	29	17	14	6.3	16	6.2	1.4
3	4.4	6.2	8.2	23	6.6	153	17	16	23	13	4.0	13
4	4.8	5.9	7.3	19	33	95	16	43	15	11	3.4	26
5	4.8	4.3	6.2	22	30	44	18	39	14	10	2.9	11
6	6.1	3.4	6.0	20	15	37	19	25	16	9.2	2.5	4.8
7	1.1	3.4	14	13	11	31	17	19	14	8.4	2.5	3.3
8	9.9	4.2	17	11	10	42	16	17	13	7.5	4.3	2.8
9	9.2	3.6	12	10	9.1	50	14	19	12	7.3	3.6	2.5
10	6.0	2.1	9.6	21	8.2	33	14	34	12	6.6	2.6	2.2
11	17	3.1	9.4	23	7.5	26	14	28	12	6.0	2.1	1.9
12	8.4	2.9	8.6	17	7.0	24	15	20	11	5.5	1.8	1.7
13	2.7	2.8	8.0	14	12	25	17	17	9.9	9.9	1.8	1.6
14	2.1	2.7	7.3	14	37	24	25	15	9.1	20	1.8	2.2
15	1.9	2.7	9.1	13	29	20	22	33	8.9	14	6.4	2.6
16	1.8	4.9	12	10	19	29	17	44	8.0	7.7	4.6	2.2
17	2.2	4.6	10	8.0	14	81	16	29	17	6.2	2.8	1.8
18	2.4	3.1	8.4	7.7	12	114	15	21	20	5.3	2.4	1.7
19	2.4	2.6	7.0	9.4	11	52	14	19	7.0	4.9	2.1	3.9
20	2.4	2.6	7.0	10	13	37	16	19	45	6.8	1.8	11
21	2.4	2.6	8.6	11	16	31	24	31	30	6.6	1.5	7.3
22	2.4	3.9	8.6	11	18	36	22	25	35	5.3	1.4	6.2
23	2.2	4.2	6.6	10	13	75	30	18	32	4.0	1.3	5.7
24	2.2	2.7	7.7	10	11	44	33	15	25	4.2	1.3	3.7
25	4.0	8.6	13	9.9	11	33	25	14	20	4.9	1.7	3.3
26	6.2	17	12	8.9	10	28	20	12	17	11	1.5	3.1
27	4.5	11	12	7.0	10	25	17	11	15	8.0	8.6	2.9
28	3.4	14	10	6.2	11	23	15	11	13	4.6	9.9	2.9
29	2.9	15	9.1	6.2	13	21	15	10	12	7.9	7.9	2.8
30	2.7	23	8.6	6.2	-----	20	14	9.6	25	3.3	2.4	3.1
31	2.6	-----	13	6.2	-----	10	-----	10	-----	2.9	1.9	-----
TOTAL	92.15	178.5	308.3	381.7	408.4	1,319	555	649.6	640.9	255.0	101.6	140.0
MEAN	2.97	5.95	9.95	12.3	14.1	42.5	18.5	21.0	21.4	8.23	3.28	4.67
MAX	17	23	21	23	37	153	33	44	70	22	9.9	26
MIN	4.8	2.6	6.0	6.2	5.3	18	14	9.6	8.0	2.9	1.3	1.4
CFSM	5.4	1.08	1.00	2.23	2.55	7.70	3.35	3.80	3.88	1.49	.59	.85
IN.	.62	1.20	2.08	2.57	2.75	8.89	3.74	4.38	4.32	1.72	.68	.94
CAL YR 1971	TOTAL 3,113.27	MEAN 8.53	MAX 55	MIN .36	CFSM 1.55	IN 20.98						
WTR YR 1972	TOTAL 5,030.15	MEAN 13.7	MAX 153	MIN .48	CFSM 2.48	IN 33.90						

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1700	4.79	258	3-23	0630	3.26	88
3-8	2330	2.95	60	6-1	2300	3.09	73
3-18	0045	3.91	155	6-19	-	-	190

† About.

NOTE.--No gage-height record June 17 to July 7.

THAMES RIVER BASIN

121

Reservoirs in Thames River basin

01123350. EAST BRIMFIELD LAKE on Quinebaug River, 0.7 mile southwest of Fishdale, Mass., 1.2 miles east of East Brimfield, completed in 1960, used for flood control, conservation, and recreation, has usable capacity of 1,400,000,000 cu ft. Records furnished by Corps of Engineers.
01123550. WESTVILLE LAKE on Quinebaug River, 1.3 miles west of Southbridge, Mass., completed in 1962, used for flood control and recreation, has usable capacity of 484,000,000 cu ft. Records furnished by Corps of Engineers.
01124300. HODGES VILLAGE RESERVOIR on French River at Hodges Village, Mass., 0.8 mile west of Oxford, completed in 1960 for flood control, has usable capacity of 577,000,000 cu ft. Records furnished by Corps of Engineers.
01124400. BUFFUMVILLE LAKE on Little River at Buffumville, Mass., 2.2 miles west of Oxford, completed in 1958, used for flood control and recreation, has usable capacity of 555,000,000 cu ft. Records furnished by Corps of Engineers.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	East Brimfield Lake	Westville Lake	Hodges Village Reservoir	Buffumville Lake
Sept. 30, 1971.....	102.7	4.8	0.6	61.9
Oct. 31.....	111.0	4.8	.5	63.6
Nov. 30.....	114.3	5.7	1.4	69.7
Dec. 31.....	112.6	6.1	1.0	68.8
Jan. 31, 1972.....	109.3	5.7	1.0	67.1
Feb. 29.....	111.0	5.8	1.2	68.0
Mar. 31.....	220.5	7.4	4.1	112.2
Apr. 30.....	116.0	5.7	1.4	70.6
May 31.....	112.6	5.8	.8	67.1
June 30.....	116.0	6.2	1.0	68.8
July 31.....	104.4	6.1	.6	64.5
Aug. 31.....	102.7	4.7	.6	61.9
Sept. 30.....	104.4	4.7	.5	62.7

CONNECTICUT RIVER BASIN

01127880 Big Brook near Pittsburg, N.H.

LOCATION.--Lat 45°08'06", long 71°12'23", Coos County, on left bank 10 ft downstream from culvert on U. S. Highway 3, 0.3 mile upstream from mouth, and 11 miles northeast of Pittsburg.

DRAINAGE AREA.--6.36 sq mi.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (from topographic map).

AVERAGE DISCHARGE.--8 years (1964-72), 14.2 cfs (30.32 inches per year).

EXTREMES.--Current year: Maximum discharge, 345 cfs May 4 (gage height, 4.00 ft), from rating curve extended above 160 cfs; minimum, 1.3 cfs Sept. 22-26.

Period of record: Maximum discharge, 441 cfs May 3, 1967 (gage height, 3.61 ft), from rating curve extended above 110 cfs; minimum gage height, 5.02 ft Dec. 27, 1969 (ice jam); minimum discharge not determined (occurred during period of ice effect in 1968 water year); minimum daily, 1.3 cfs Mar. 8, 12, 15, 1968.

REMARKS.--Records good except those for winter period, which are fair, and those for periods of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.9	4.5	3.9	3.1	2.2	5.3	89	17	5.8	14	2.8
2	4.6	4.6	4.3	3.7	3.0	3.0	6.2	99	32	5.5	11	2.2
3	4.6	4.9	4.1	3.8	3.7	5.0	6.4	108	25	4.9	25	3.8
4	4.3	4.9	4.0	3.6	4.0	3.7	6.2	220	23	14	30	3.6
5	4.1	4.7	3.9	3.5	3.5	3.2	6.0	174	40	7.7	19	2.8
6	6.9	4.5	4.0	3.5	3.3	3.6	5.9	46	25	5.8	14	2.4
7	8.5	8.0	4.3	3.4	3.1	2.9	5.8	131	20	4.9	11	2.4
8	6.2	10	4.4	3.4	2.9	2.8	5.7	104	17	4.3	13	3.3
9	4.5	7.5	5.2	3.4	2.8	2.7	5.5	91	35	4.3	14	3.6
10	13	6.0	5.4	3.3	2.6	2.6	5.2	80	45	4.1	11	2.6
11	31	5.7	6.0	3.2	2.6	2.5	5.2	67	60	9.0	15	2.2
12	20	5.4	8.0	3.2	2.7	2.4	5.2	56	35	6.5	12	2.6
13	14	5.0	7.0	3.1	2.7	2.4	5.8	65	20	4.9	10	2.6
14	11	4.4	6.2	4.5	3.3	2.3	6.9	163	17	5.8	8.1	2.4
15	10	4.5	5.6	5.0	3.2	2.3	6.2	150	14	4.9	6.2	2.2
16	9.0	4.4	8.0	4.4	3.6	2.2	6.2	121	15	20	5.2	2.2
17	8.1	4.3	6.2	4.0	2.6	2.7	6.9	100	13	29	4.3	2.0
18	6.9	4.5	5.2	3.8	2.7	10	12	140	11	18	7.7	2.0
19	6.5	6.0	4.7	3.6	2.6	30	29	140	9.0	18	12	1.8
20	5.8	6.0	4.4	3.5	2.5	20	55	70	7.6	19	6.9	1.7
21	5.5	6.6	4.3	3.4	2.5	14	35	50	6.8	53	5.2	2.0
22	5.5	5.6	4.2	3.3	2.4	10	27	35	6.1	44	4.3	1.7
23	5.2	4.5	4.1	3.3	2.4	8.0	27	26	6.5	23	3.8	1.5
24	4.9	3.7	4.0	3.2	2.3	7.3	28	21	7.3	17	3.8	1.5
25	4.6	4.0	4.5	3.2	2.3	6.9	28	18	7.2	18	4.5	1.5
26	9.0	4.7	5.5	3.6	2.3	6.4	25	15	12	54	4.3	3.6
27	8.1	5.0	5.2	4.5	2.2	6.5	23	14	16	43	4.1	2.8
28	6.5	4.8	4.6	4.0	2.2	6.2	21	12	11	46	4.1	2.2
29	5.8	4.6	4.3	3.7	2.2	5.8	25	11	8.1	35	3.6	2.6
30	5.5	4.5	4.0	3.5	-----	5.4	43	10	4.2	24	2.4	6.9
31	5.2	-----	4.1	3.3	-----	5.2	-----	9.0	-----	18	2.2	-----
TOTAL	250.4	160.2	154.6	112.8	80.9	190.1	479.1	2,475.8	567.8	571.4	291.7	76.9
MEAN	8.08	5.34	4.99	3.64	2.79	6.13	16.6	79.8	18.9	18.4	9.41	2.56
MAX	31	10	8.0	5.0	4.0	30	55	220	60	54	30	6.9
MIN	4.1	3.7	3.9	3.1	2.2	2.2	5.2	9.0	6.1	4.1	2.2	1.5
CFSM	1.27	.84	.70	.57	.44	.96	2.52	12.5	2.97	2.89	1.48	.40
IN.	1.46	.94	.90	.66	.47	1.11	2.80	14.48	3.32	3.34	1.71	.45

CAL YR 1971 TOTAL 4,558.6 MEAN 12.5 MAX 160 MIN 1.4 CFSM 1.97 IN 26.66
WTR YR 1972 TOTAL 5,410.9 MEAN 14.8 MAX 220 MIN 1.5 CFSM 2.33 IN 31.65

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2400	4.00	345				
5-15	0330	3.34	204				

NOTE.--No gage-height record Nov. 5 to Dec. 10, May 17 to June 13.

CONNECTICUT RIVER BASIN

123

01128500 Connecticut River at First Connecticut Lake, near Pittsburg, N.H.

LOCATION.--Lat 45°05'14", long 71°17'34", Coos County, on right bank 0.2 mile downstream from dam at First Connecticut Lake, 6 miles north-east of Pittsburg, and at mile 392.0.

DRAINAGE AREA.--183.0 sq mi.

PERIOD OF RECORD.--April 1917 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map). Prior to Jan. 1, 1918, discharge computed from flow through gates at dam 0.2 mile upstream. Jan. 1 to July 28, 1918, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years, 194 cfs (31.74 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 819 cfs July 20, 21, 23, 24, 25, 26, 31, Aug. 1, 2 (gage height, 3.51 ft); minimum daily, 4.8 cfs Apr. 17.

Period of record: Maximum discharge, 7,200 cfs June 16, 1943 (gage height, 6.25 ft), from rating curve extended above 1,900 cfs on basis of computation of flow over dam at gage height 6.12 ft; maximum gage height, 6.35 ft May 5, 1925 (backwater from logging operations); minimum daily discharge, 3.1 cfs Mar. 17, 18, 1929.

REMARKS.--Records good. Flow completely regulated by First Connecticut and Second Connecticut Lakes (see p. 207).

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	241	411	241	211	196	263	8.2	17	48	496	303
2	191	241	413	241	211	193	260	8.2	19	48	320	303
3	236	241	410	226	211	196	260	9.8	150	48	108	303
4	256	241	410	203	211	193	256	12	346	48	165	303
5	256	241	407	203	211	193	256	11	778	48	193	267
6	256	256	405	203	211	193	252	9.8	786	48	193	155
7	256	271	403	203	211	193	248	11	653	48	149	152
8	256	271	401	203	207	193	256	11	548	48	179	152
9	256	271	407	200	207	193	252	11	559	48	226	152
10	256	267	417	200	207	193	218	12	553	48	226	152
11	256	267	412	200	207	189	179	12	553	48	226	126
12	256	267	411	200	203	186	149	13	553	48	226	95
13	248	267	409	200	203	218	134	13	355	48	226	95
14	244	267	408	196	203	252	126	13	252	49	252	95
15	244	267	406	196	203	248	43	13	165	49	315	95
16	244	267	415	196	203	248	5.4	13	113	49	315	95
17	241	263	425	196	203	244	4.8	14	113	51	315	95
18	244	263	424	196	200	260	5.4	15	113	51	311	95
19	244	263	421	193	200	267	6.0	15	113	51	311	95
20	241	263	415	207	200	267	6.0	15	113	307	311	95
21	241	263	412	215	200	263	6.0	17	89	648	311	95
22	241	260	411	215	200	263	6.0	27	78	762	311	95
23	241	260	407	215	200	263	6.0	24	78	478	311	95
24	241	260	415	215	200	260	6.0	21	78	484	311	95
25	241	260	424	215	200	256	6.7	22	80	490	311	95
26	241	336	422	215	196	256	6.7	148	80	641	311	95
27	244	420	421	215	196	252	6.7	278	80	746	307	95
28	244	417	417	215	196	252	6.7	270	80	746	307	121
29	241	414	415	211	196	248	6.7	269	60	746	307	161
30	241	412	412	211	-----	248	7.4	129	48	746	307	161
31	241	-----	353	211	-----	256	-----	16	-----	460	307	-----
TOTAL	7,510	8,497	12,739	5,456	5,907	7,132	3,244.5	1,453.0	7,603	8,178	8,464	3,677
MEAN	242	283	411	208	204	230	108	46.9	253	264	273	123
MAX	256	420	425	241	211	267	263	270	786	762	496	303
MIN	132	241	353	193	196	186	4.8	8.2	17	48	108	95
MEAN†	125	50.7	69.5	73.1	60.8	81.0	190	11.81	24.7	275	110	17.4
CFSM†	1.51	.61	.84	.88	.73	.98	2.29	14.2	2.98	3.31	1.33	.21
IN.†	1.74	.68	.97	1.02	.79	1.13	2.56	16.41	3.32	3.82	1.53	.23

CAL YR 1971 TOTAL 73,720.6 MEAN 202 MAX 533 MIN 4.8 MEAN† 179 CFSM† 2.16 IN† 29.28
WTR YR 1972 TOTAL 80,860.5 MEAN 221 MAX 786 MIN 4.8 MEAN† 208 CFSM† 2.51 IN† 34.20

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes.

CONNECTICUT RIVER BASIN

01129200 Connecticut River below Indian Stream, near Pittsburg, N.H.

LOCATION.--Lat 45°02'25", long 71°26'37", Coos County, on right bank 1,200 ft downstream from Indian Stream, 2.5 miles west of Pittsburg, and at mile 376.5.

DRAINAGE AREA.--254 sq mi.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

AVERAGE DISCHARGE.--16 years, 548 cfs (29.30 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 3,540 cfs May 5 (gage height, 6.33 ft); minimum daily, 104 cfs May 31.

Period of record: Maximum discharge, 4,580 cfs Nov. 29, 1959 (gage height, 7.07 ft), from rating curve extended above 2,000 cfs; minimum daily, 30 cfs Aug. 6, 1965.

REMARKS.--Records good. Flow regulated by First Connecticut and Second Connecticut Lakes and by Lake Francis 3.7 miles upstream (see p. 207).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	548	842	567	528	517	441	1,360	125	170	1,140	454
2	396	546	830	563	540	517	448	1,640	227	171	1,110	526
3	550	544	835	562	582	525	472	1,480	268	175	1,240	530
4	546	537	830	559	579	520	479	2,430	251	358	1,340	526
5	544	532	824	556	574	520	481	3,070	474	337	1,210	526
6	545	531	823	549	573	488	456	1,520	271	212	1,120	526
7	575	554	831	544	578	445	433	1,670	241	172	797	521
8	577	599	837	543	580	440	425	1,520	242	169	533	521
9	559	566	831	538	576	390	433	1,270	399	167	532	520
10	570	551	830	538	570	345	405	1,160	1,460	215	513	520
11	814	551	860	535	565	340	346	966	1,600	375	547	515
12	753	544	951	534	562	336	327	829	1,460	369	504	514
13	656	539	949	537	556	336	244	898	1,040	347	492	511
14	621	525	897	562	567	325	151	1,080	792	343	486	512
15	608	534	891	582	574	326	154	1,600	612	343	469	508
16	605	539	924	585	574	328	153	1,390	591	482	462	504
17	590	541	992	571	572	345	179	1,070	656	608	456	502
18	577	546	923	568	567	396	279	1,310	425	520	471	496
19	570	548	888	565	563	502	527	1,130	283	445	554	496
20	564	613	883	562	571	560	921	810	271	663	514	493
21	559	626	879	557	574	598	771	605	207	1,130	481	490
22	556	595	869	549	571	693	564	487	172	1,600	461	489
23	550	567	853	544	560	674	520	359	165	1,040	461	484
24	546	536	864	544	570	646	600	280	168	829	459	484
25	548	546	888	554	553	626	585	223	240	839	452	484
26	577	659	893	550	519	610	500	191	302	1,020	451	484
27	597	854	878	547	514	471	467	168	350	1,320	445	356
28	582	858	877	544	508	392	412	143	314	1,780	448	260
29	568	852	873	539	504	405	530	123	239	1,410	446	193
30	560	850	864	538	-----	430	816	110	177	1,100	437	145
31	553	-----	767	533	-----	438	-----	104	-----	1,200	434	-----
TOTAL	17,758	17,930	26,976	17,119	16,224	14,484	13,519	30,796	14,022	19,909	19,465	14,090
MEAN	573	598	870	552	559	467	451	993	467	642	628	470
MAX	814	858	992	585	582	693	921	3,070	1,600	1,780	1,340	530
MIN	342	525	767	533	504	325	151	104	125	167	434	145
MEAN†	296	187	284	191	121	247	757	3,146	586	670	313	63.3
CFSM†	1.17	.74	1.12	.75	.48	.97	2.98	12.4	2.31	2.64	1.23	.25
IN.†	1.35	.82	1.29	.87	.51	1.12	3.32	14.28	2.58	3.04	1.42	.28

CAL YR 1971 TOTAL 194,144 MEAN 532 MAX 1,690 MIN 42 MEAN† 506 CFSM† 1.99 IN† 27.03
 WTR YR 1972 TOTAL 222,292 MEAN 607 MAX 3,070 MIN 104 MEAN† 576 CFSM† 2.27 IN† 30.89

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

CONNECTICUT RIVER BASIN

125

01127000 Falls Stream near East Hareford, Quebec

(International gaging station)

LOCATION.--Lat 45°02'41", long 71°-2'54", Compton County, on right bank opposite Alain's farm, 2.5 miles downstream from East Hareford, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--85 sq mi.

PERIOD OF RECORD.--October 1962 to current year in reports of Geological Survey. October 1948 to September 1962 available from Water Survey of Canada, Department of the Environment.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (from topographic map). Prior to Dec. 13, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 166 cfs (26.52 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,090 cfs May 4 (gage height, 12.53 ft), minimum, 10 cfs Sept. 24-27.
Period of record: Maximum discharge observed, 4,150 cfs June 29, 1959 (gage height, 12.64 ft); minimum observed, 4 cfs Sept. 10, 1960.
Flood in June 1943 reached a discharge of 21,000 cfs, by slope-area method at site 0.5 mile downstream.

REMARKS.--Records good except those for winter period, which are fair.

COOPERATION.--This station is maintained by Canada under agreement with the United States.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	44	60	83	62	42	123	1,940	93	29	140	20
2	27	41	52	78	61	42	152	1,770	240	28	111	19
3	26	45	50	74	60	60	171	1,850	181	29	341	17
4	26	43	50	72	62	74	151	2,450	150	30	403	18
5	24	41	50	70	70	80	149	2,700	285	50	208	19
6	24	40	50	70	67	72	146	1,300	144	35	136	18
7	55	75	51	68	64	65	129	1,680	134	27	108	17
8	52	109	54	68	60	58	124	1,230	129	23	128	15
9	42	76	57	67	56	54	121	1,000	279	21	135	16
10	51	63	61	66	54	52	112	848	338	19	99	14
11	344	64	163	65	53	50	121	679	442	56	143	17
12	184	60	321	64	52	47	150	611	220	39	91	16
13	111	50	215	64	52	47	206	502	150	26	80	15
14	85	44	103	70	58	46	184	636	116	25	67	16
15	77	39	136	115	64	45	190	757	95	26	57	16
16	71	43	239	140	58	44	174	570	134	454	47	16
17	62	39	300	135	54	71	228	440	109	361	41	15
18	55	43	218	120	52	330	462	701	78	173	53	13
19	51	68	100	100	50	640	927	713	65	159	132	12
20	47	109	135	90	48	420	1,250	365	53	351	76	12
21	44	120	105	80	47	310	916	278	42	616	53	12
22	41	95	88	75	46	237	706	214	37	676	42	11
23	40	66	90	70	45	190	726	165	37	215	36	11
24	37	48	87	67	44	161	910	133	35	139	35	10
25	37	47	110	66	44	140	779	108	33	227	34	10
26	90	43	130	78	44	126	654	91	44	260	32	10
27	97	50	110	100	43	116	594	80	67	400	29	11
28	76	64	95	90	43	109	551	71	46	1,770	32	16
29	62	64	87	75	43	106	895	63	37	869	31	15
30	53	64	83	70	-----	113	1,650	55	30	335	26	16
31	49	-----	81	65	-----	119	-----	50	-----	201	23	-----
TOTAL	2,071	1,893	3,671	2,524	1,556	4,066	13,651	24,050	3,843	7,719	2,969	447
MEAN	66.8	61.1	118	81.4	53.7	131	455	776	128	249	95.8	14.9
MAX	344	189	321	140	70	640	1,650	2,700	442	1,770	403	20
MIN	24	39	50	64	43	42	112	50	30	19	23	10
CFSM	.79	.74	1.39	.96	.63	1.54	5.35	9.13	1.51	2.93	1.13	.18
IN.	.91	.83	1.61	1.10	.68	1.78	5.97	10.53	1.68	3.38	1.30	.20

CAL YR 1971 TOTAL 57,010.5 MEAN 156 MAX 1,670 MIN 7.2 CFSM 1.04 IN 24.95
WTR YR 1972 TOTAL 68,460.9 MEAN 187 MAX 2,700 MIN 10 CFSM 2.20 IN 29.96

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2400	12.53	4,090				
7-28	0530	11.22	3,210				

CONNECTICUT RIVER BASIN

01129500 Connecticut River at North Stratford, N.H.

LOCATION.--Lat 44°44'56", long 71°37'50", Coos County, on left bank at North Stratford, 400 ft downstream from Nulhegan River, and at mile 344.5.

DRAINAGE AREA.--799 sq mi.

PERIOD OF RECORD.--August 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 880.17 ft above mean sea level.

AVERAGE DISCHARGE.--42 years, 1,549 cfs (26.33 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 20,300 cfs May 5 (gage height, 12.25 ft); minimum daily, 392 cfs Sept. 29.
Period of record: Maximum discharge, 28,700 cfs June 16, 1943 (gage height, 14.67 ft), from rating curve extended above 15,000 cfs; maximum gage height, 16.66 ft Mar. 13, 1936 (ice jam); minimum daily discharge, 108 cfs Sept. 29, 1960.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 207) 36 miles upstream.

REVISIONS (WATER YEARS).--WSP 781: 1934(M). WSP 891: Drainage area.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	829	1,200	900	800	720	1,200	8,920	985	582	1,800	628
2	443	423	1,100	1,000	780	780	1,250	11,000	2,150	563	1,650	666
3	622	876	950	940	820	900	1,300	11,600	1,810	698	2,260	690
4	689	857	1,050	980	820	960	1,350	15,500	1,400	1,760	3,820	685
5	683	838	1,000	930	840	1,050	1,400	19,200	2,440	1,200	2,670	692
6	715	819	1,050	900	820	980	1,400	12,300	1,690	797	2,010	679
7	1,020	1,050	950	860	790	920	1,340	10,700	1,500	605	1,740	659
8	953	1,340	1,050	820	830	850	1,180	10,500	1,390	541	1,270	655
9	845	1,140	1,150	900	780	780	1,180	8,320	1,540	570	1,160	727
10	927	1,010	1,100	1,000	790	780	1,160	7,010	3,080	673	1,150	715
11	2,300	1,000	1,200	800	800	730	1,110	5,740	3,330	1,890	1,270	673
12	1,990	957	1,600	880	800	650	1,090	5,160	2,840	1,160	1,090	657
13	1,460	931	1,900	910	750	690	1,260	4,450	2,320	864	983	662
14	1,210	857	1,800	1,000	800	680	1,180	5,400	1,660	769	907	679
15	1,090	810	1,600	1,100	830	660	1,190	7,210	1,480	728	837	679
16	1,020	760	1,600	1,150	860	650	1,180	6,760	2,160	1,020	777	654
17	965	740	1,450	1,100	890	710	1,340	5,450	1,970	1,710	736	634
18	908	820	1,800	1,000	840	1,200	2,090	5,620	1,520	1,510	791	622
19	874	880	1,600	980	830	2,200	3,570	5,780	1,040	1,040	1,160	613
20	854	960	1,350	980	820	2,150	5,680	4,180	828	1,270	1,010	616
21	837	1,050	1,300	960	810	2,100	5,070	3,180	797	1,940	833	603
22	814	1,000	1,350	940	790	2,000	4,090	2,540	671	3,640	750	594
23	801	920	1,100	860	780	2,000	3,910	1,990	617	2,370	721	583
24	785	800	1,300	900	780	1,950	4,310	1,660	696	1,550	826	575
25	815	700	1,600	980	770	1,800	4,420	1,380	639	1,550	833	575
26	973	740	1,500	960	760	1,650	3,690	1,090	821	1,940	1,180	578
27	1,130	900	1,500	1,000	770	1,600	3,460	983	1,080	2,750	865	587
28	1,020	1,100	1,450	920	750	1,300	2,870	883	951	3,620	945	432
29	939	1,150	1,400	840	730	1,200	3,910	782	775	4,410	872	392
30	882	1,200	1,350	840	-----	1,200	6,030	677	615	2,640	758	427
31	844	-----	1,150	830	-----	1,150	-----	586	-----	1,990	685	-----
TOTAL	29,969	27,897	42,000	29,160	23,230	36,990	74,210	186,551	44,795	48,350	38,359	18,611
MEAN	967	930	1,355	941	801	1,193	2,474	6,018	1,493	1,560	1,237	620
MAX	2,300	1,380	1,950	1,150	890	2,200	6,030	19,200	3,330	4,410	3,820	727
MIN	483	700	950	800	730	650	1,090	586	615	541	885	392
MEAN†	690	520	769	579	363	973	2,780	8,170	1,612	1,588	922	214
CFSMT	.86	.65	.96	.72	.45	1.22	3.48	10.2	2.02	1.99	1.15	.27
IN.†	1.00	.73	1.11	.84	.49	1.40	3.88	11.79	2.25	2.29	1.33	.30
CAL YR 1971	TOTAL 514,497	MEAN 1,410	MAX 10,000	MIN 165	MEAN† 1,383	CFSMT† 1.73	IN† 23.51					
WTR YR 1972	TOTAL 600,122	MEAN 1,640	MAX 19,200	MIN 392	MEAN† 1,609	CFSMT† 2.01	IN† 27.41					

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

CONNECTICUT RIVER BASIN

127

01130000 Upper Ammonoosuc River near Groveton, N.H.

LOCATION.--Lat 44°37'30", long 71°28'10", Coos County, on left bank 75 ft upstream from highway bridge, 0.2 mile downstream from Nash Stream, and 2.8 miles northeast of Groveton.

DRAINAGE AREA.--232 sq mi.

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 470 cfs (27.51 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, about 7,400 cfs May 4 (gage height, about 7.5 ft); minimum, 50 cfs about Sept. 25.

Period of record: Maximum discharge, 24,100 cfs May 20, 1969 (gage height, 12.01 ft in gage well, 12.85 ft, from floodmarks), from rating curve extended above 5,600 cfs on basis of contracted-opening measurement of peak flow, caused by failure of dam on Nash Stream; minimum, 32 cfs Sept. 14, 1948.

Flood in March 1936 reached a stage of about 10.6 ft, from information by local residents.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Prior to May 21, 1969, some regulation by pond 9 miles upstream on Nash Stream. Small diversion above station for municipal supply of Berlin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	139	145	175	140	115	300	2,620	760	313	201	108
2	79	142	140	170	140	150	320	3,730	1,240	299	175	97
3	79	186	135	165	140	190	330	5,310	924	344	245	93
4	77	189	135	160	160	220	315	6,200	748	908	525	89
5	79	182	130	160	175	220	310	6,120	948	604	403	89
6	84	164	130	160	170	195	300	4,300	682	407	263	82
7	196	219	130	155	155	175	280	4,240	634	326	214	75
8	183	328	145	155	150	165	275	4,920	610	290	236	78
9	139	233	160	155	140	165	260	3,750	658	250	250	90
10	177	193	165	150	135	165	250	3,030	865	299	272	84
11	840	187	180	150	125	150	260	2,510	809	1,400	259	77
12	600	170	300	150	120	140	300	2,230	616	830	210	72
13	349	162	310	150	120	120	380	2,050	495	470	179	66
14	261	125	270	170	135	120	400	2,380	421	445	157	80
15	222	120	240	250	140	115	390	1,550	380	389	140	75
16	196	125	280	240	145	110	390	3,730	1,020	308	128	70
17	177	120	330	225	140	130	500	3,130	795	376	115	64
18	165	125	300	210	130	250	787	3,140	500	326	132	60
19	159	130	270	200	125	500	1,150	2,770	407	263	179	58
20	147	187	240	190	130	700	1,520	2,400	358	326	153	62
21	142	190	220	180	125	560	1,410	2,060	331	515	119	62
22	136	171	210	170	120	480	1,180	1,850	304	760	108	60
23	131	134	200	165	120	430	1,190	1,470	331	440	97	56
24	125	110	190	160	115	390	1,270	1,220	542	340	157	53
25	142	125	230	165	115	370	1,380	1,020	547	313	179	50
26	265	135	260	220	115	350	1,320	837	500	344	236	51
27	280	154	220	190	115	340	1,140	724	553	403	175	52
28	219	161	190	160	115	325	980	646	445	340	205	51
29	183	159	220	150	115	310	1,250	586	367	362	254	51
30	159	152	200	150	-----	305	1,770	515	317	295	170	55
31	147	-----	185	145	-----	300	-----	510	-----	236	128	-----
TOTAL	6,224	4,917	6,460	5,395	3,870	8,255	21,907	83,548	18,117	13,521	6,264	2,110
MEAN	201	164	208	174	133	266	730	2,695	604	436	202	70.3
MAX	840	328	330	250	175	700	1,770	6,200	1,240	1,400	525	108
MIN	77	110	130	145	115	110	250	510	304	236	97	50
MEAN†	203	167	211	177	136	269	733	2,698	606	439	205	73.2
CFSM†	.88	.72	.91	.76	.59	1.16	3.16	11.6	2.61	1.89	.88	.32
IN.†	1.01	.80	1.05	.88	.63	1.34	3.53	13.41	2.92	2.18	1.02	.35

CAL YR 1971 TOTAL 147,545

MEAN 404

MAX 4,020

MIN 62

MEAN† 407

CFSM† 1.75

IN† 23.82

WTR YR 1972 TOTAL 180,578

MEAN 493

MAX 6,200

MIN 50

MEAN† 496

CFSM† 2.14

IN† 29.12

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	12300	†7.5	†7,400				
5-15	2400	5.99	3,970				

† About.

† Adjusted for diversion for municipal supply of Berlin. Records of diversion furnished by city of Berlin.

NOTE.--No gage-height record May 4, Sept. 9-11, 13-30.

CONNECTICUT RIVER BASIN

01131500 Connecticut River near Dalton, N.H.

LOCATION.--Lat 44°24'36", long 71°43'16". Coos County, on left bank 250 ft upstream from highway bridge, 1,200 ft downstream from dam of Gilman Paper Co., 1.2 miles downstream from Dalton, and at mile 300.1.

DRAINAGE AREA.--1,514 sq mi.

PERIOD OF RECORD.--March 1927 to current year. Published as "at Waterford, Vt." 1927-35. Records published for both sites January to September 1935.

GAGE.--Water-stage recorder. Datum of gage is 799.89 ft above mean sea level. Prior to Sept. 30, 1935, nonrecording gage at bridge 10.5 miles downstream at mean sea level. Jan. 1, 1935, to June 29, 1937, nonrecording gage at bridge 250 ft downstream at present datum. Since June 2, 1961, auxiliary water-stage recorder 10.8 miles downstream from base gage. July 11, 1956, to June 1, 1961, auxiliary nonrecording gage read hourly at same site.

AVERAGE DISCHARGE.--45 years, 2,839 cfs (25.46 inches per year), adjusted to drainage area at present site and for storage.

EXTREMES.--Current year: Maximum discharge, 32,200 cfs May 6 (gage height, 21.34 ft); minimum daily, 520 cfs Sept. 25.

Period of record: Maximum discharge, 48,300 cfs Mar. 20, 1936 (gage height, 25.6 ft); minimum daily, 115 cfs Oct. 3, 1937.

REMARKS.--Records good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (see p. 207), and other reservoirs. These reservoirs have a combined usable capacity of about 8.3 billion cubic feet.

REVISIONS (WATER YEARS).--WSP 891: Drainage area. WSP 1231: 1935. WSP 1301: 1928-35(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	ALG	SEP
1	882	1,190	1,740	1,500	1,200	1,050	2,340	11,900	2,010	1,370	2,640	1,240
2	875	1,280	1,740	1,600	1,100	1,100	2,410	15,400	3,960	1,330	2,360	1,170
3	833	1,310	1,190	1,450	1,100	1,400	2,480	19,900	4,730	1,160	2,410	1,260
4	784	1,250	1,480	1,500	1,150	1,600	2,590	25,100	3,570	2,300	3,520	600
5	847	1,320	1,330	1,450	1,200	1,750	2,670	30,400	3,570	3,140	4,570	1,020
6	1,110	1,310	1,440	1,350	1,200	1,700	2,690	30,900	4,040	2,350	3,330	1,200
7	1,120	1,260	1,260	1,300	1,050	1,630	2,540	24,800	3,320	2,040	2,640	1,010
8	1,510	1,800	1,570	1,200	1,150	1,430	2,340	21,700	3,170	1,640	2,380	833
9	1,420	2,000	1,680	1,300	1,050	1,370	2,230	20,300	2,970	1,250	2,140	1,040
10	1,310	1,580	1,590	1,620	1,100	1,410	2,170	17,100	3,990	1,190	2,000	1,130
11	2,480	1,410	1,750	1,110	1,150	1,300	2,180	13,700	5,370	2,140	1,950	1,060
12	3,920	1,300	2,200	1,340	1,150	1,100	2,270	11,000	5,000	3,850	1,970	1,020
13	2,960	1,490	3,110	1,440	1,050	1,180	2,580	9,320	4,130	2,600	1,720	973
14	2,270	1,300	2,740	1,560	1,050	1,170	2,710	8,680	3,400	2,020	1,410	966
15	1,960	1,140	2,400	1,850	1,200	1,140	2,730	10,200	2,650	1,880	1,340	966
16	1,520	1,030	2,320	1,950	1,250	1,080	2,800	12,600	2,800	1,700	1,340	959
17	1,680	1,040	3,040	1,800	1,300	1,180	3,200	12,400	4,510	1,860	1,310	959
18	1,630	1,200	3,220	1,600	1,250	2,200	4,480	11,100	3,390	2,410	1,290	959
19	1,390	1,260	2,620	1,550	1,200	3,390	6,930	10,500	2,600	2,230	1,240	952
20	1,320	1,380	2,050	1,550	1,150	4,240	9,400	9,730	2,110	1,970	1,560	816
21	1,320	1,760	2,000	1,550	1,150	4,070	10,100	7,940	1,820	2,100	1,440	826
22	1,260	1,780	2,100	1,500	1,100	3,750	8,960	6,540	1,650	4,320	1,210	826
23	1,240	1,680	1,900	1,300	1,100	3,840	8,180	5,430	1,530	4,740	1,210	826
24	1,190	1,160	1,150	1,400	1,100	3,690	8,340	4,420	1,580	3,230	1,260	833
25	1,190	917	1,650	1,550	1,100	3,370	8,780	3,720	1,850	2,530	1,440	820
26	1,380	798	2,400	1,550	1,100	3,060	8,540	3,080	1,720	2,520	1,650	695
27	1,550	1,030	2,350	1,600	1,100	2,900	7,420	2,630	1,880	3,040	1,830	757
28	1,830	1,650	2,250	1,400	1,050	2,580	6,470	2,370	2,090	3,570	1,610	777
29	1,640	1,700	2,150	1,250	1,050	2,280	6,720	2,160	1,910	4,750	1,660	679
30	1,480	1,740	2,050	1,250	-----	2,200	8,760	1,930	1,540	4,660	1,540	627
31	1,290	-----	1,750	1,250	-----	2,200	-----	1,760	-----	3,230	1,340	-----
TOTAL	47,081	41,065	61,870	45,620	32,900	66,360	146,010	368,710	88,860	79,120	59,350	27,503
MEAN	1,519	1,369	1,994	1,472	1,134	2,141	4,867	11,890	2,962	2,552	1,915	917
MAX	3,820	2,000	3,220	1,950	1,300	4,240	10,100	30,900	5,370	4,750	4,570	1,260
MIN	784	798	1,150	1,110	1,050	1,050	2,170	1,760	1,530	1,160	1,210	520
MEAN†	1,242	958	1,410	1,110	695	1,920	5,173	14,050	3,081	2,580	1,599	510
CFSM†	.82	.63	.93	.73	.46	1.27	3.42	9.28	2.04	1.70	1.06	.34
IN.†	.95	.71	1.07	.85	.50	1.46	3.81	10.70	2.27	1.97	1.22	.38

CAL YR 1971 TOTAL 920,570 MEAN 2,522 MAX 16,800 MIN 520 MEAN† 2,496 CFSM† 1.65 IN† 22.38
WTR YR 1972 TOTAL 1,064,449 MEAN 2,908 MAX 30,900 MIN 520 MEAN† 2,877 CFSM† 1.90 IN† 25.87

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

CONNECTICUT RIVER BASIN

129

01133000 East Branch Passumpsic River near East Haven, Vt.

LOCATION.--Lat 44°38'02", long 71°53'53", Caledonia County, on right bank in Burke, 0.5 mile upstream from Flower Brook, 2.1 miles south of East Haven, and 8.4 miles upstream from mouth.

DRAINAGE AREA.--53.8 sq mi.

PERIOD OF RECORD.--July 1939 to October 1945, October 1948 to current year. Prior to October 1951, published as Passumpsic River near East Haven.

GAGE.--Water-stage recorder. Datum of gage is 945.88 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--30 years, 100 cfs (25.24 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,180 cfs May 4 (gage height, 6.25 ft); minimum, 29 cfs Sept. 24, 28, 29.
Period of record: Maximum discharge, 2,200 cfs Apr. 18, 1960 (gage height, 6.28 ft), from rating curve extended above 1,300 cfs; maximum gage height, 6.58 ft Mar. 5, 1964 (ice jam); minimum discharge, 13 cfs Sept. 1-5, 1953.
Flood in November 1927 reached a stage of about 12.6 ft, from information by local resident.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS.--WSP 1141: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	42	46	46	37	32	74	669	163	75	53	47
2	35	44	45	47	36	37	83	793	178	70	51	43
3	34	49	43	46	36	50	86	1,020	144	115	136	41
4	33	46	42	45	37	65	77	1,210	128	171	197	41
5	32	43	41	45	39	50	75	1,100	174	90	103	40
6	35	42	45	45	37	46	74	668	117	72	77	37
7	56	73	50	44	36	43	70	885	152	64	73	35
8	44	75	52	44	36	41	74	699	127	60	97	36
9	41	59	50	43	36	39	72	597	165	60	85	53
10	77	54	51	43	36	38	65	513	167	164	73	46
11	153	49	90	43	36	38	69	431	134	276	77	39
12	83	48	110	45	35	37	74	393	106	108	64	37
13	62	47	80	47	36	37	86	379	92	79	62	36
14	54	45	70	60	39	36	90	415	83	73	55	44
15	51	40	71	55	43	35	93	473	80	68	52	43
16	48	38	100	51	45	38	102	401	488	61	47	38
17	46	40	80	48	41	100	121	346	227	98	46	36
18	44	42	68	46	38	250	176	294	136	71	57	35
19	43	47	65	44	36	200	252	250	106	67	79	33
20	42	78	85	43	35	150	292	218	96	70	58	33
21	42	65	70	43	34	130	229	198	90	253	50	32
22	42	56	50	42	33	120	216	174	82	216	45	31
23	41	48	54	41	32	170	232	152	80	108	45	30
24	40	36	65	43	32	120	241	137	83	87	64	30
25	48	40	80	54	32	100	233	122	81	89	125	30
26	66	50	70	48	31	90	211	113	103	143	144	31
27	60	56	60	44	31	84	192	106	110	105	72	32
28	52	52	57	42	31	80	193	100	91	91	85	30
29	48	48	53	40	31	76	313	93	78	78	81	30
30	44	47	50	39	-----	74	467	86	70	66	59	75
31	42	-----	48	38	-----	72	-----	88	-----	58	51	-----
TOTAL	1,573	1,499	1,943	1,404	1,037	2,478	4,632	13,124	3,935	3,206	2,363	1,144
MEAN	50.7	50.0	62.7	45.3	35.8	79.9	154	423	131	103	76.2	38.1
MAX	153	78	110	60	45	250	467	1,210	488	276	197	75
MIN	32	36	41	38	31	32	65	86	70	58	45	30
CFSM	.94	.93	1.17	.84	.67	1.49	2.86	7.86	2.43	1.91	1.42	.71
IN.	1.09	1.04	1.34	.97	.72	1.71	3.20	9.07	2.72	2.22	1.63	.79
CAL YR 1971	TOTAL 34,138	MEAN 93.5	MAX 736	MIN 24	CFSM 1.74	IN 23.60						
WTR YR 1972	TOTAL 38,338	MEAN 105	MAX 1,210	MIN 30	CFSM 1.95	IN 26.51						

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2200	6.25	2,180				
5-7	2000	4.52	1,070				

CONNECTICUT RIVER BASIN

01134500 Moose River at Victory, Vt.

LOCATION.--Lat 44°30'42", long 72°50'13", Essex County, on right bank at Victory, 2.7 miles upstream from highway bridge.

DRAINAGE AREA.--75.2 sq mi.

PERIOD OF RECORD.--January 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,103.99 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--25 years, 136 cfs (24.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,920 cfs May 5 (gage height, 10.51 ft); minimum, 9.2 cfs Sept. 23.

Period of record: Maximum discharge, 3,010 cfs Apr. 25, 1970 (gage height, 10.61 ft); maximum gage height, 10.89 ft Apr. 21, 1950; minimum discharge, 3.6 cfs Aug. 20, 1970.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS.--WSP 1381: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	31	42	57	42	27	126	1,100	160	49	48	28
2	16	32	37	55	39	45	142	1,500	328	47	42	24
3	15	44	36	56	39	80	152	1,970	319	40	79	21
4	14	44	35	54	41	110	144	2,370	162	156	175	19
5	13	39	34	52	41	110	138	2,510	187	87	115	19
6	16	35	33	51	39	90	133	1,260	127	55	68	17
7	54	58	36	50	38	82	121	1,170	175	40	55	15
8	43	107	37	49	40	66	110	1,320	158	34	81	14
9	32	71	39	49	35	58	107	918	176	32	75	20
10	45	52	40	50	33	50	104	775	240	30	60	22
11	298	50	56	51	32	44	113	618	182	418	64	17
12	193	45	120	55	33	40	123	512	129	376	49	15
13	99	43	110	57	34	39	148	426	100	120	42	13
14	71	35	80	70	38	38	146	486	82	160	35	17
15	58	29	68	90	42	37	150	602	71	166	31	21
16	49	30	110	80	44	38	162	651	354	89	26	18
17	43	31	140	70	41	50	211	493	351	146	23	15
18	38	34	100	62	36	200	313	394	147	132	26	13
19	35	37	76	62	34	350	417	318	105	80	66	11
20	32	73	70	68	34	330	607	273	87	79	45	11
21	32	73	64	40	32	260	606	222	80	152	30	10
22	30	57	56	55	30	210	513	191	67	526	24	9.5
23	30	43	52	54	29	230	476	151	59	293	21	9.9
24	29	27	57	55	29	210	466	128	70	129	61	11
25	38	28	100	58	29	185	473	108	63	108	59	16
26	68	32	110	75	28	160	464	92	70	191	156	20
27	65	40	85	60	28	145	433	82	85	139	68	25
28	52	41	74	52	27	130	348	73	64	106	81	31
29	43	40	70	48	26	125	455	66	51	99	90	31
30	37	40	65	46	-----	120	678	58	44	79	51	44
31	34	-----	62	44	-----	120	-----	58	-----	60	35	-----
TOTAL	1,640	1,341	2,094	1,795	1,013	3,779	8,579	20,895	4,293	4,218	1,881	557.4
MEAN	52.9	44.7	67.5	57.9	34.9	122	286	674	143	136	60.7	18.6
MAX	298	107	140	90	44	350	678	2,510	354	526	175	44
MIN	13	27	33	44	26	27	104	58	44	30	21	9.5
CFSM	.70	.59	.90	.77	.46	1.62	3.80	8.96	1.90	1.81	.81	.25
IN.	.81	.66	1.04	.89	.50	1.87	4.24	10.34	2.12	2.09	.93	.28

CAL YR 1971 TOTAL 44,137.2 MEAN 121 MAX 1,350 MIN 9.2 CFSM 1.61 IN 21.83
WTR YR 1972 TOTAL 52,085.4 MEAN 142 MAX 2,510 MIN 9.5 CFSM 1.89 IN 25.77

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0600	10.51	2,920				

CONNECTICUT RIVER BASIN

131

01134800 Kirby Brook at Concord, Vt.

LOCATION.--Lat 44°26'31", long 71°52'45", Essex County, on right bank 30 ft downstream from culvert on U.S. Highway 2, 700 ft upstream from mouth, and 1 mile north of Concord.

DRAINAGE AREA.--8.05 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 10.8 cfs (18.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 914 cfs May 4 (gage height, 5.52 ft); from rating curve extended above 87 cfs on basis of measurement of flow through culvert at gage height 6.35 ft; maximum gage height, 5.95 ft Mar. 18 (backwater from ice); minimum discharge, 0.13 cfs Sept. 23.

Period of record: Maximum discharge, 914 cfs May 4, 1972 (gage height, 5.52 ft), from rating curve extended above 87 cfs on basis of measurement of flow through culvert at gage height 6.35 ft; maximum gage height, 7.21 ft Dec. 9, 1970 (backwater from ice); no flow Aug. 19, 1970.

REMARKS.--Records good except those for winter period, which are fair. Recording rain gage at station since April 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	1.9	4.1	5.8	4.3	3.9	21	108	18	2.9	1.1	.77
2	.64	2.2	3.9	4.0	4.1	6.0	24	135	14	2.4	1.0	.64
3	.78	3.3	3.9	5.8	4.1	9.0	22	174	11	3.4	3.7	.51
4	.69	2.6	3.9	5.6	4.6	15	20	224	7.5	7.0	4.9	.51
5	.64	2.4	3.6	5.4	4.6	10	20	131	10	3.0	2.4	.51
6	1.5	2.2	3.8	5.2	4.3	7.2	19	77	6.5	2.3	1.4	.40
7	4.6	7.1	4.1	5.1	4.1	6.2	18	94	17	1.9	2.0	.31
8	1.9	4.3	4.1	5.1	3.9	5.2	21	61	10	1.5	1.7	.29
9	1.5	3.6	4.3	5.0	3.7	5.4	19	48	17	1.2	2.2	.84
10	13	3.1	4.4	5.0	3.6	5.1	17	39	14	3.0	1.7	.84
11	23	3.1	10	5.0	3.4	4.0	19	32	11	1.6	1.2	.42
12	7.8	3.1	15	5.1	3.3	4.0	26	29	7.0	4.1	.95	.40
13	4.6	3.1	11	5.4	3.3	4.7	26	25	5.4	2.6	.76	.37
14	3.6	2.9	4.5	9.0	4.1	4.5	24	24	4.4	2.4	.64	.90
15	2.0	2.2	7.0	7.0	4.4	4.5	24	35	3.0	2.3	.60	.97
16	2.4	2.6	17	6.2	5.1	4.7	31	20	12	2.1	.55	.71
17	2.2	2.6	12	5.8	4.4	10	44	22	7.0	9.2	.60	.62
18	2.0	3.1	9.0	5.6	4.4	6.0	43	18	4.4	3.3	1.9	.34
19	1.9	3.9	7.8	5.4	4.3	5.0	46	15	3.7	2.9	1.1	.34
20	1.4	7.8	7.2	5.6	4.1	4.0	90	14	3.4	3.4	.80	.34
21	1.8	6.0	6.4	5.4	3.0	3.3	70	13	3.4	1.8	.60	.26
22	1.6	5.3	5.8	5.2	3.9	2.8	43	11	2.9	11	.50	.23
23	1.6	4.1	5.5	4.0	3.6	3.2	58	8.5	2.7	4.4	1.0	.21
24	1.5	3.0	6.0	5.2	3.6	3.0	62	7.0	3.2	3.3	1.6	.23
25	3.8	3.0	11	6.5	3.6	2.5	63	5.6	2.9	3.0	5.0	.34
26	5.3	3.5	10	8.0	3.4	2.2	57	4.9	4.8	2.0	2.0	.40
27	3.8	4.0	9.0	6.2	3.4	2.0	46	4.4	4.3	3.0	2.5	.37
28	3.1	3.8	7.5	5.6	3.4	1.8	49	4.1	3.2	2.3	1.8	.31
29	2.4	3.6	7.0	5.2	3.6	1.7	70	3.4	2.4	2.6	1.5	.23
30	2.2	3.9	6.5	4.0	-----	1.7	90	3.0	2.3	1.9	1.3	.59
31	2.0	-----	6.0	4.8	-----	1.8	-----	3.7	-----	1.4	1.0	-----
TOTAL	107.24	109.8	224.3	176.0	114.7	521.8	1,263	1,306.4	219.5	131.1	49.92	13.99
MFAN	3.46	3.66	7.24	5.68	3.96	16.8	42.1	45.1	7.32	4.23	1.61	.47
MAX	23	7.8	17	9.0	5.1	6.0	90	224	18	18	5.0	.97
MIN	.64	1.9	3.6	4.8	3.3	3.9	17	3.0	2.3	1.2	.50	.21
CFSM	.43	.45	.90	.71	.40	2.09	5.23	5.60	.91	.53	.20	.06
IN.	.50	.51	1.04	.81	.53	2.41	5.94	6.45	1.01	.61	.23	.06

CAL YD 1971 TOTAL 3,569.42 MEAN 9.78 MAX 132 MIN .22 CFSM 1.21 IN 16.49
WTR YD 1972 TOTAL 4,328.15 MFAN 11.8 MAY 224 MIN .21 CFSM 1.47 IN 20.00

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	1945	5.52	914				

CONNECTICUT RIVER BASIN

01135000 Moose River at St. Johnsbury, Vt.

LOCATION.--Lat 44°25'22", long 72°00'02", Caledonia County, on left bank at St. Johnsbury, 0.5 mile upstream from mouth.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--August 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 585 ft (from topographic map). Prior to Nov. 16, 1934, nonrecording gage at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--44 years, 216 cfs (22.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,820 cfs May 5 (gage height, 4.23 ft); maximum gage height, 5.77 ft Mar. 18 (ice jam); minimum discharge, 12 cfs Sept. 24, 25, 28, 29.
Period of record: Maximum discharge, 5,820 cfs May 5, 1972 (gage height, 4.23 ft); maximum gage height, 8.3 ft Apr. 30, 1929 (from graph based on gage readings, site and datum then in use); minimum discharge, 6.2 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 1231: 1929-30, 1931-34(M). WSP 1381: Drainage area. WSP 1701: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	56	64	100	67	45	265	1,720	205	68	63	40
2	23	57	62	90	63	65	312	2,900	456	60	54	33
3	21	66	60	82	62	100	318	4,100	514	67	75	29
4	20	72	56	77	66	160	284	3,260	274	181	190	27
5	20	66	55	74	68	200	284	4,750	265	141	170	25
6	23	61	54	75	65	160	260	3,380	201	84	93	23
7	20	74	65	72	62	140	223	1,650	241	62	70	21
8	72	132	42	69	59	120	202	1,970	256	51	86	19
9	55	114	79	69	57	95	195	1,420	269	45	100	22
10	72	86	85	74	55	42	209	1,050	377	44	79	27
11	317	84	110	72	51	72	233	922	295	414	72	28
12	295	77	190	71	50	67	289	754	205	574	67	21
13	156	74	200	74	53	64	324	700	159	190	54	19
14	114	53	150	85	58	61	318	700	127	135	49	21
15	96	48	120	120	64	60	329	790	109	233	43	26
16	79	49	150	150	70	60	377	856	324	127	37	26
17	70	52	210	125	64	80	526	736	562	145	32	23
18	63	60	175	105	59	250	790	628	230	198	32	19
19	58	62	140	100	55	550	1,090	490	152	110	58	17
20	56	36	120	98	54	600	1,270	422	122	102	68	16
21	53	102	105	98	52	450	1,120	349	109	154	44	15
22	52	94	94	90	50	350	1,020	295	95	646	34	14
23	49	66	90	86	48	450	1,020	233	82	514	29	13
24	47	36	96	87	46	380	1,020	195	88	184	37	12
25	58	40	110	94	46	330	988	165	87	141	72	12
26	86	47	170	110	44	290	955	143	97	198	159	13
27	98	60	130	105	43	270	823	127	112	184	106	13
28	89	71	110	85	43	240	642	113	95	135	87	13
29	75	71	100	80	43	225	823	100	75	125	115	12
30	67	69	95	74	-----	215	1,270	90	66	106	77	14
31	60	-----	90	70	-----	210	-----	88	-----	79	51	-----
TOTAL	2,417	2,085	3,441	2,761	1,617	4,441	17,819	36,996	6,285	5,506	2,303	611
MEAN	78.0	69.5	111	89.1	55.8	208	594	1,129	210	178	74.3	20.4
MAX	317	132	230	150	70	600	1,270	4,750	562	646	190	40
MIN	20	36	54	69	43	45	195	88	66	44	29	12
CFSM	.61	.54	.87	.70	.44	1.63	4.64	8.82	1.64	1.39	.54	.16
IN.	.70	.61	1.00	.80	.47	1.87	5.18	10.17	1.83	1.60	.67	.18
CAL YR 1971	TOTAL 70,284	MEAN 193	MAX 1,700	MIN 13	CFSM 1.51	IN 20.43						
WTR YR 1972	TOTAL 86,282	MEAN 236	MAX 4,750	MIN 12	CFSM 1.84	IN 25.08						

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	2030	4.23	5,820				

CONNECTICUT RIVER BASIN

133

01135500 Passumpsic River at Passumpsic, Vt.

LOCATION.--Lat 44°21'56", long 72°02'23", Caledonia County, on right bank 0.7 mile upstream from Water Andrie, 1 mile downstream from dam and village of Passumpsic, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--436 sq mi.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only October 1928, published in WSP 1301.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

AVERAGE DISCHARGE.--44 years, 712 cfs (22.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,900 cfs May 5 (gage height, 16.88 ft); minimum daily, 33 cfs Sept. 24.
Period of record: Maximum discharge, 16,000 cfs Mar. 18, 1936 (gage height, 21.23 ft), from rating curve extended above 12,000 cfs on basis of computation of peak flow over dam; minimum daily, 13 cfs Sept. 12, 1948.
Maximum stage since at least 1780, about 31.5 ft in November 1927, from information by local residents (discharge not determined).

REMARKS.--Records excellent except those for winter period, which are fair. Low flow regulated by powerplants above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 871: Drainage area. WSP 1231: 1929, 1930-31(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	262	290	300	270	210	850	4,620	822	391	318	207
2	181	223	270	310	260	260	1,000	6,370	1,170	389	281	172
3	84	286	200	320	260	350	950	8,440	1,120	389	470	174
4	245	314	220	310	270	460	860	9,850	789	990	917	183
5	193	255	190	300	270	520	800	10,700	1,070	611	692	230
6	166	262	270	290	260	450	760	6,160	790	428	449	182
7	213	252	260	280	255	380	700	5,690	1,000	365	367	162
8	276	540	250	300	250	390	627	5,550	868	317	460	146
9	239	384	280	290	245	360	633	4,150	972	299	482	171
10	269	304	270	300	245	340	682	3,520	1,220	315	396	168
11	1,250	342	350	290	240	320	755	2,900	971	1,820	353	197
12	815	286	700	300	240	310	864	2,540	752	1,120	326	183
13	514	279	640	320	250	320	998	2,250	615	610	300	170
14	375	166	420	380	270	310	945	2,300	529	577	265	122
15	342	286	400	450	290	310	990	2,690	476	608	263	184
16	297	223	560	390	310	330	1,190	2,670	1,800	449	210	200
17	279	210	750	360	300	380	1,510	2,260	1,720	662	216	159
18	243	255	560	340	280	1,200	2,130	1,820	887	653	205	168
19	269	300	370	310	260	2,000	2,670	1,570	667	437	334	169
20	249	315	420	320	230	1,600	3,270	1,360	576	544	330	131
21	235	397	430	310	240	1,200	2,710	1,240	533	842	252	147
22	226	379	370	290	250	1,000	2,480	1,080	486	1,970	201	145
23	173	290	310	290	240	1,300	2,490	925	417	1,040	247	89
24	262	213	320	310	250	1,400	2,490	828	434	633	204	33
25	242	144	400	320	230	1,100	2,410	734	443	563	309	211
26	416	319	470	370	220	900	2,290	655	495	635	675	156
27	397	262	440	350	190	840	2,090	614	622	620	439	133
28	350	286	370	310	250	800	1,850	576	505	529	380	102
29	297	330	350	280	220	720	2,550	528	501	502	422	112
30	207	293	330	270	-----	800	3,430	489	370	444	364	139
31	252	-----	320	290	-----	760	-----	466	-----	349	257	-----
TOTAL	4,810	8,712	11,780	9,860	7,345	21,620	47,974	95,545	23,641	20,041	11,384	4,745
MEAN	316	290	380	318	253	697	1,599	3,082	788	646	367	158
MAX	1,250	580	750	450	310	2,000	3,430	10,700	1,800	1,970	917	230
MIN	84	144	190	270	190	210	627	466	370	299	201	33
CFSM	.72	.67	.87	.73	.58	1.60	3.67	7.07	1.81	1.48	.84	.36
IN.	.84	.74	1.01	.84	.63	1.84	4.09	8.15	2.02	1.71	.97	.40

CAL YR 1971 TOTAL 242,276 MEAN 664 MAX 6,400 MIN 57 CFSM 1.52 IN 20.67
WTR YR 1972 TOTAL 272,457 MEAN 744 MAX 10,700 MIN 33 CFSM 1.71 IN 23.25

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0615	16.88	11,900				

CONNECTICUT RIVER BASIN

01137500 Ammonoosuc River at Bethlehem Junction, N.H.

LOCATION.--Lat 44°16'08", long 71°37'52", Grafton County, on left bank 0.2 mile upstream from Pierce Bridge and Bethlehem Junction, 0.8 mile upstream from unnamed tributary entering from left, 3 miles east of Bethlehem, 3.4 miles downstream from Little River, and at mile 35.0.

DRAINAGE AREA.--87.6 sq mi.

PERIOD OF RECORD.--August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,180.74 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years, 204 cfs (31.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,540 cfs May 4 (gage height, 6.43 ft); maximum gage height, 7.34 ft Mar. 18 (ice jam); minimum discharge, 21 cfs Nov. 24, result of freezeup.
Period of record: Maximum discharge, 10,800 cfs Oct. 24, 1939 (gage height, 12.09 ft), from rating curve extended above 4,100 cfs on basis of slope-area measurement of peak flow; minimum, 16 cfs Nov. 14, 1932 (caused by anchor ice upstream).

REMARKS.--Records excellent except those for winter period, which are fair. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1701: 1951(M), 1953-54(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	64	60	74	62	74	124	425	435	126	65	53
2	44	65	58	76	61	150	165	1,150	441	115	61	48
3	64	69	54	40	60	250	154	1,650	306	168	69	45
4	46	64	53	75	66	210	124	2,000	231	572	77	45
5	45	62	52	72	76	170	122	1,750	215	236	66	46
6	49	59	62	70	68	160	115	1,040	182	173	58	44
7	95	99	66	71	65	155	108	1,570	270	142	54	40
8	56	116	92	70	62	125	102	1,160	295	126	59	40
9	56	81	70	64	60	115	106	452	289	110	57	54
10	106	73	74	75	50	105	47	668	470	102	91	54
11	491	70	130	70	60	95	94	564	474	180	77	44
12	206	66	145	75	61	88	104	490	269	120	63	40
13	137	66	115	74	68	88	119	489	225	99	58	39
14	113	54	81	120	80	84	116	776	190	93	54	45
15	101	50	42	105	103	86	107	1,440	167	85	53	43
16	42	50	127	98	92	85	137	1,130	184	76	48	38
17	26	54	140	54	86	530	187	1,010	186	78	45	35
18	51	39	94	88	82	1,050	255	937	146	71	50	33
19	74	65	94	82	74	484	372	929	124	67	96	33
20	75	110	135	88	76	253	563	434	114	90	69	34
21	73	91	115	42	74	214	340	834	109	121	54	32
22	70	76	71	76	74	190	284	744	104	147	47	30
23	67	60	64	80	71	273	346	572	211	91	43	30
24	64	44	102	84	72	226	400	523	264	80	42	29
25	64	56	109	100	70	177	402	419	251	101	47	32
26	109	68	93	96	66	152	352	323	194	104	81	31
27	97	70	82	90	64	137	275	286	175	127	53	41
28	83	64	90	42	61	130	252	283	150	100	178	38
29	75	60	90	74	59	126	344	275	159	107	123	32
30	71	62	84	69	-----	120	515	249	133	86	77	36
31	65	-----	80	64	-----	114	-----	241	-----	72	62	-----
TOTAL	2,911	2,098	2,780	2,523	2,632	6,136	4,742	26,067	6,997	3,985	2,077	1,184
MEAN	93.9	67.6	89.7	81.4	78.1	194	225	841	233	129	67.0	39.5
MAX	491	116	145	120	100	1,050	563	2,000	474	572	178	54
MIN	45	45	52	65	59	74	97	249	108	67	42	29
CFS/IN	1.07	.79	1.02	.93	.86	2.26	2.57	9.60	2.66	1.47	.76	.45
IN/IN	1.24	.97	1.14	1.07	.86	2.61	2.87	11.67	2.97	1.69	.88	.50

CAL YR 1971 TOTAL 65,018 MEAN 174 MAX 1,720 MIN 36 CFS/IN 2.03 IN 27.61
WTR YR 1972 TOTAL 65,497 MEAN 174 MAX 2,000 MIN 29 CFS/IN 2.04 IN 27.81

PEAK DISCHARGE (BASE, 2,700 CFS).--No peak above base.

CONNECTICUT RIVER BASIN

135

01138000 Ammonoosuc River near Bath, N.H.

LOCATION.--Lat 44°09'14", long 71°59'10", Grafton County, on left bank 0.4 mile downstream from Wild Ammonoosuc River, 1.5 miles downstream from Bath, and 3.3 miles upstream from mouth.

DRAINAGE AREA.--395 sq mi.

PERIOD OF RECORD.--September 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 454.14 ft above mean sea level (levels by Connecticut River Power Co.).

AVERAGE DISCHARGE.--37 years, 641 cfs (22.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,100 cfs May 5 (gage height, 9.82 ft); minimum daily, 83 cfs Sept. 24.

Period of record: Maximum discharge, 27,900 cfs Mar. 18, 1936 (gage height, 15.40 ft), from rating curve extended above 13,000 cfs on basis of slope-area measurement at gage height 14.28 ft; minimum daily, 35 cfs Sept. 15, 1957.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by small powerplants above station; greater fluctuation prior to 1968.

REVISIONS.--WSP 871: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	187	216	250	210	230	600	3,140	1,340	318	254	171
2	115	182	203	260	200	300	400	4,350	2,530	303	211	153
3	112	205	200	270	200	720	740	4,490	1,250	316	231	139
4	108	201	190	260	210	720	680	7,830	900	1,490	270	133
5	106	190	185	250	250	620	600	7,300	800	772	246	134
6	114	182	200	240	240	450	550	3,940	720	508	213	126
7	172	206	280	240	220	370	540	4,080	900	400	195	121
8	190	332	240	240	210	330	520	3,490	1,050	340	204	120
9	153	273	250	230	200	340	510	2,720	1,110	303	244	136
10	251	216	230	250	195	320	500	2,120	1,550	274	354	154
11	1,170	217	400	240	190	290	550	1,820	1,690	512	290	142
12	674	205	600	250	190	280	700	1,520	1,110	414	242	126
13	423	195	500	250	190	270	880	1,250	830	310	207	117
14	333	155	340	370	240	260	400	1,060	685	272	191	129
15	245	135	320	400	320	250	910	3,310	506	252	191	133
16	256	145	400	350	320	250	1,320	2,750	401	224	175	121
17	234	145	500	310	300	500	1,690	2,510	720	219	156	109
18	217	180	400	300	270	3,000	2,100	2,200	570	209	158	98
19	206	166	240	290	260	1,800	2,630	2,050	484	354	204	92
20	226	216	310	300	250	1,000	3,450	2,050	400	444	229	94
21	203	271	340	280	240	820	2,430	1,810	357	397	186	95
22	148	232	330	240	235	700	1,930	1,810	326	583	159	92
23	141	192	240	250	230	1,000	1,990	1,210	337	424	144	87
24	172	126	340	270	225	1,000	2,310	1,040	500	460	136	83
25	177	100	370	290	220	780	2,260	930	516	438	131	84
26	271	120	320	330	215	680	1,930	730	443	431	136	86
27	304	203	280	320	210	630	1,710	650	417	417	173	101
28	252	235	300	260	205	580	1,670	614	378	363	424	107
29	233	220	310	240	200	560	1,920	546	344	404	410	103
30	209	204	240	224	-----	540	2,360	552	340	372	261	98
31	196	-----	270	215	-----	560	-----	436	-----	300	200	-----
TOTAL	7,887	5,444	4,774	4,500	4,655	20,220	41,712	74,817	23,462	12,876	6,825	3,484
MEAN	254	196	155	145	150	652	1,340	2,441	795	415	220	116
MAX	1,170	332	600	400	320	3,000	3,450	7,830	2,530	1,490	424	171
MIN	106	100	185	215	190	230	400	536	325	204	131	83
CFSM	.54	.50	.49	.50	.50	1.65	3.52	6.24	2.01	1.05	.56	.29
IN.	.74	.55	.42	.50	.43	1.90	3.43	7.24	2.29	1.21	.64	.33

CAL YR 1971 TOTAL 193,529 MEAN 530 MAX 4,540 MIN 76 CFSM 1.34 IN 14.23
WTR YR 1972 TOTAL 224,576 MEAN 614 MAX 7,830 MIN 83 CFSM 1.56 IN 21.15

PEAK DISCHARGE (BASE, 6,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0145	9.82	10,100				

01138500 Connecticut River at Wells River, Vt.

LOCATION.--Lat 44°09'13", long 72°02'34", Orange County, on right bank at village of Wells River, 200 ft downstream from bridge on U. S. Highway 302, 400 ft upstream from Wells River, 1,200 ft downstream from Ammonoosuc River, and at mile 266.0.

DRAINAGE AREA.--2,644 sq mi.

PERIOD OF RECORD.--October 1949 to current year. October and November 1949 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 399.75 ft above mean sea level.

AVERAGE DISCHARGE.--23 years, 4,645 cfs (23.86 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 44,500 cfs May 6 (gage height, 14.24 ft); minimum daily, 279 cfs Dec. 5.
Period of record: Maximum discharge, 54,000 cfs Mar. 27, 1953 (gage height, 15.96 ft); minimum daily, 152 cfs Aug. 28, 1960.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 207), and other reservoirs (combined usable capacity, about 14.8 billion cubic feet).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1,750	2,500	2,010	800	2,500	2,280	7,130	19,100	5,240	1,540	3,730	1,990	
2	415	2,400	2,600	600	2,200	2,490	5,120	23,400	6,750	1,320	3,630	545	
3	372	3,300	3,060	2,500	2,020	3,350	5,930	27,700	7,720	1,910	3,850	371	
4	2,600	2,700	1,550	3,600	2,320	3,790	7,220	31,800	7,200	2,790	4,900	337	
5	3,000	2,420	274	3,100	1,550	1,820	7,120	41,900	5,920	4,210	4,990	1,240	
6	3,400	743	1,790	3,400	900	3,100	7,320	41,700	5,890	4,440	2,720	2,210	
7	3,500	841	2,850	2,870	3,800	4,140	5,930	38,300	6,420	4,350	3,840	2,440	
8	2,530	2,770	2,980	1,300	4,400	3,550	7,440	32,300	6,500	1,550	7,220	1,830	
9	650	3,010	2,860	700	3,250	3,000	2,400	28,200	6,350	775	2,300	647	
10	820	2,470	2,620	2,200	2,500	3,620	4,500	23,700	6,530	2,090	3,490	446	
11	3,600	2,650	3,020	2,400	1,500	1,600	5,970	19,100	7,230	3,160	3,140	1,180	
12	3,900	2,560	2,470	2,000	700	700	6,290	16,300	7,510	4,600	1,900	1,200	
13	4,000	944	3,840	2,240	500	2,570	5,740	14,900	6,800	6,290	839	1,520	
14	3,600	602	4,810	2,600	1,600	3,690	4,420	17,800	5,940	4,530	2,780	2,110	
15	3,600	2,660	3,370	1,800	2,200	3,440	6,060	15,200	5,380	2,990	2,490	1,630	
16	1,250	2,550	3,830	1,700	2,000	2,610	6,850	14,100	5,040	1,580	2,270	928	
17	900	2,120	4,920	4,370	2,150	3,090	7,810	17,000	6,330	3,670	2,270	564	
18	2,300	2,160	2,590	3,300	2,000	4,800	11,500	16,300	4,230	3,790	2,600	1,730	
19	3,000	2,250	1,350	2,600	967	4,700	14,200	15,200	6,600	3,800	1,790	1,220	
20	2,350	1,090	3,790	3,200	699	6,030	17,300	14,200	5,180	4,300	606	1,290	
21	2,350	1,040	4,000	3,300	1,680	7,310	17,300	12,400	4,780	3,720	2,850	1,540	
22	2,100	2,940	3,400	2,050	2,320	7,300	15,600	10,700	3,940	5,790	2,450	1,320	
23	1,400	3,040	3,210	649	2,200	8,070	14,700	7,600	3,740	4,870	1,480	428	
24	630	2,820	1,510	3,200	1,910	9,050	15,100	7,360	2,190	6,050	2,250	280	
25	2,000	400	1,600	3,600	2,000	10,300	15,400	6,340	1,880	4,740	4,440	977	
26	3,700	1,120	1,990	3,900	1,340	7,390	14,500	6,500	3,440	4,620	1,410	981	
27	3,600	856	4,610	3,200	794	7,300	13,300	2,400	3,480	3,840	971	1,000	
28	4,000	733	4,400	2,500	2,130	7,300	11,500	1,480	2,870	5,850	2,870	1,010	
29	4,200	2,410	4,360	900	2,400	7,240	12,400	1,470	2,930	5,290	2,770	1,070	
30	500	2,630	4,540	700	-----	7,180	13,600	3,540	2,470	4,430	2,980	467	
31	400	-----	3,060	2,840	-----	7,180	-----	7,660	-----	4,350	2,450	-----	
TOTAL	72,387	40,549	42,759	74,329	55,890	150,270	287,760	530,620	154,838	117,545	85,446	34,711	
MEAN	2,335	2,020	2,992	2,398	1,962	4,847	9,592	17,120	5,161	3,792	2,754	1,157	
MAX	4,200	3,300	4,920	4,320	4,600	10,300	17,300	41,900	7,720	4,290	4,980	2,440	
MIN	372	400	274	600	540	700	2,400	1,470	1,800	775	606	280	
MEAN†	1,989	1,679	2,431	2,001	1,214	3,770	9,598	20,840	5,183	3,959	2,266	756	
CFSMT	.75	.64	.92	.76	.46	1.43	3.63	7.88	1.96	1.50	.86	.29	
IN.†	.87	.71	1.06	.87	.50	1.64	4.05	9.09	2.19	1.73	.99	.32	
CAL YR 1971 TOTAL	1,503,424	MEAN	4,119	MAX	25,600	MIN	246	MEAN†	4,094	CFSMT	1.55	IN†	21.02
WTR YR 1972 TOTAL	1,718,194	MEAN	4,695	MAX	41,900	MIN	279	MEAN†	4,663	CFSMT	1.76	IN†	24.01

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-6	0100	14.24	44,500				

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, and Moore and Comerford Reservoirs.
NOTE.--No gage-height record Oct. 4 to Nov. 4.

CONNECTICUT RIVER BASIN

137

01139000 Wells River at Wells River, Vt.

LOCATION.--Lat 44°09'03", long 72°03'55", Orange County, on right bank 800 ft upstream from railroad bridge, 0.8 mile west of village of Wells River, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--98.4 sq mi.

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 505.53 ft above mean sea level (levels by Connecticut River Power Co.).

AVERAGE DISCHARGE.--32 years, 134 cfs (18.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,960 cfs May 5 (gage height, 7.03 ft); minimum, 19 cfs Sept. 24.

Period of record: Maximum discharge, 3,230 cfs June 2, 1952 (gage height, 8.12 ft), from rating curve extended above 1,400 cfs on basis of computation of peak flow over dam; minimum, 5.1 cfs Oct. 6, 1948; minimum daily, 8.3 cfs Sept. 5, 1953.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation at low flow prior to 1958 caused by small power-plant above station. Flow partly regulated by Graton and Rickar Ponds.

REVISIONS (WATER YEARS).--WSP 1171: Drainage area. WSP 1201: 1942(P), 1944-45(M), 1946-47(P), 1948(M), 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	45	56	72	64	62	174	1,020	245	86	54	27
2	24	52	54	70	61	60	217	1,320	241	79	58	26
3	24	62	54	72	61	120	222	1,000	194	75	64	25
4	27	57	54	72	64	145	144	1,930	147	141	67	25
5	22	55	52	69	64	100	141	2,000	151	106	61	25
6	25	52	63	67	62	90	174	1,140	125	44	53	23
7	25	64	74	64	60	100	141	1,100	147	75	56	22
8	24	41	64	64	54	100	142	944	147	74	78	23
9	24	54	74	64	54	44	134	734	144	64	45	23
10	22	52	74	70	56	64	144	594	169	63	63	32
11	246	63	120	64	54	64	171	495	154	69	53	25
12	123	53	120	64	54	74	194	453	123	64	47	23
13	63	62	110	64	54	74	247	454	144	60	46	23
14	67	67	90	64	64	72	250	366	94	64	45	32
15	59	64	60	64	74	72	254	446	94	65	49	32
16	53	67	110	60	72	74	375	427	127	54	42	27
17	44	63	130	74	64	100	444	344	119	74	34	25
18	45	66	60	70	64	400	422	342	49	62	43	23
19	43	64	60	70	64	340	653	342	64	124	64	23
20	41	64	110	70	54	260	420	240	44	134	44	25
21	46	62	100	64	54	230	652	241	64	105	40	23
22	34	48	72	64	57	200	442	245	62	131	36	22
23	34	44	64	62	60	330	544	203	77	114	34	20
24	37	34	110	70	64	300	624	176	106	241	33	19
25	48	45	120	70	52	230	602	156	134	156	33	23
26	65	53	100	65	52	145	567	145	149	114	31	25
27	54	44	90	65	51	163	505	136	121	94	30	24
28	52	58	62	74	50	145	456	125	64	42	51	24
29	44	55	64	64	50	140	542	116	94	74	44	24
30	44	54	60	64	-----	154	777	143	62	64	34	28
31	42	-----	74	64	-----	143	-----	112	-----	60	29	-----
TOTAL	1,692	1,619	2,744	2,226	1,682	4,773	11,714	14,261	7,047	2,936	1,513	762
MEAN	54.6	52.0	85.5	71.8	54.0	154	380	460	230	94.6	48.8	24.4
MAX	246	63	120	64	74	400	622	2,000	245	141	64	33
MIN	22	34	52	64	50	52	130	77	44	24	24	19
CFS%	4.5	4.5	4.9	4.73	4.44	1.57	3.44	5.99	1.32	4.6	4.53	4.26
IN.	4.4	4.3	1.04	4.4	4.4	1.40	4.43	6.40	1.47	1.11	4.57	4.24

CAL YR 1971 TOTAL 44,427 MEAN 122 MAX 1,400 MIN 14 CFS% 1.24 IN 16.47
WTR YR 1972 TOTAL 53,607 MEAN 147 MAX 2,000 MIN 19 CFS% 1.49 IN 20.34

PEAK DISCHARGE (BASE, 980 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0030	7.03	2,960				

CONNECTICUT RIVER BASIN

01139800 East Orange Branch at East Orange, Vt.

LOCATION.--Lat 44°05'34", long 72°20'10", Orange County, on left bank 0.3 mile east of East Orange, 1.6 miles upstream from mouth, and 5 miles southwest of Orange.

DRAINAGE AREA.--8.95 sq mi.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 13.1 cfs (19.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 413 cfs May 4 (gage height, 4.48 ft, from peak-stage indicator), from rating curve extended as explained below; minimum, 1.2 cfs Oct. 1, 2, Sept. 7, 8, 23, 24.

Period of record: Maximum discharge, 425 cfs (revised) May 3, 1971 (gage height, 4.53 ft, from peak-stage indicator), from rating curve extended above 190 cfs on basis of slope-area measurement at gage height 5.55 ft; maximum gage height, 6.35 ft Jan. 22, 1959 (ice jam); minimum discharge, 0.1 cfs Sept. 9, 19, 1963.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WSP 1701, 1721, 1901, and WRD Mass., N.H., R.I., Vt., 1960-64, 1969-71.

Water year	Date	Discharge (cfs)	Gage height (feet)	Water year	Date	Discharge (cfs)	Gage height (feet)
1960	Oct. 24, 1959	316	4.02	1964	May 19, 1964	310	4.02
1961	June 2, 1961	183	3.44	1969	Apr. 18, 1969	299	3.96
1962	Aug. 7, 1962	236	3.70	1970	Apr. 24, 1970	251	3.71
1963	Apr. 21, 1963	231	3.64	1971	May 3, 1971	425	4.53

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow caused by mill upstream.

REVISIONS.--The figures of peak discharge for water years 1960-64, 1969-71 have been revised as shown in the following table. They supersede figures published in WSP 1701, 1721, 1901 and WRD Mass., N.H., R.I., Vt., 1960-64, 1969-71.

REVISED PEAK DISCHARGE.--1960: Oct. 1 (1830) 230 cfs (3.58 ft); Oct. 24 (1630) 316 cfs (4.02 ft); Nov. 28 (0800) 255 cfs (3.71 ft); Apr. 5 (0900) 149 cfs (3.19 ft); Apr. 15 (1445) 165 cfs (3.28 ft); Apr. 18 (1530) 274 cfs (3.85 ft); Apr. 24 (2030) 175 cfs (3.34 ft); July 30 (1830) 154 cfs (3.22 ft); Sept. 12 (1930) 165 cfs (3.28 ft).

1961: Apr. 23 (0630) 177 cfs (3.41 ft); Apr. 26 (1230) 179 cfs (3.42 ft); June 2 (0700) 183 cfs (3.44 ft).

1962: Apr. 7 (1800) 226 cfs (3.65 ft); Apr. 9 (2400) 185 cfs (3.45 ft); Aug. 7 (1800) 236 cfs (3.70 ft).

1963: Oct. 6 (2230) 227 cfs (3.62 ft); Apr. 21 (2115) 231 cfs (3.64 ft).

1964: May 14 (1030) 228 cfs (3.62 ft); May 19 (1345) 310 cfs (4.02 ft).

1969: Apr. 18 (2030) 299 cfs (3.96 ft); Apr. 23 (0630) 260 cfs (3.76 ft).

1970: Apr. 24 (1600) 251 cfs (3.71 ft); Apr. 27 (1500) 203 cfs (3.45 ft).

1971: May 3 (time unknown) 425 cfs (4.53 ft); Aug. 28 (1245) 379 cfs (4.33 ft).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.3	4.7	5.2	4.8	4.1	16	109	43	15	4.1	1.8
2	1.3	3.3	4.4	5.0	4.6	6.0	17	125	33	12	3.9	1.5
3	1.6	3.8	4.2	4.8	4.4	9.0	16	200	20	23	12	1.6
4	1.4	3.3	4.1	4.6	5.4	12	14	240	18	17	7.4	1.6
5	1.6	3.1	4.0	4.5	4.9	7.6	13	190	17	12	4.7	1.6
6	4.3	2.9	4.5	4.4	4.7	6.4	12	160	15	10	4.1	1.5
7	2.7	4.6	5.0	4.4	4.5	7.2	12	150	17	8.7	5.4	1.2
8	2.0	4.6	5.8	4.5	4.4	7.0	12	120	15	9.1	14	2.1
9	13	4.0	5.6	4.7	4.3	6.5	13	94	18	8.2	7.4	4.1
10	17	4.3	8.0	5.0	4.2	6.2	14	80	15	13	6.0	1.9
11	4.6	3.8	19	5.1	4.1	5.8	15	70	13	13	4.8	1.5
12	3.3	3.5	11	5.0	4.1	5.5	16	62	12	8.7	4.4	1.4
13	2.8	3.8	9.0	4.8	4.5	5.4	19	56	10	7.4	4.3	1.9
14	2.6	3.5	6.0	7.0	6.6	5.3	17	52	8.6	7.4	5.0	2.6
15	2.4	3.3	7.0	6.0	8.0	5.2	19	62	8.2	6.6	6.0	1.7
16	2.3	3.5	8.0	5.4	6.2	5.6	30	58	15	5.4	4.1	1.5
17	2.2	3.5	11	5.2	5.4	10	43	52	12	5.8	3.8	1.4
18	2.2	3.8	8.0	5.0	4.8	25	40	48	10	4.7	4.0	1.3
19	2.1	4.1	6.5	5.0	4.4	14	54	46	9.0	13	5.0	2.2
20	2.1	6.3	6.4	4.9	4.0	10	49	40	8.2	9.6	4.0	1.9
21	2.0	4.6	5.0	4.8	4.4	8.8	44	38	7.5	19	3.4	1.6
22	2.0	4.3	5.2	4.7	4.3	11	46	32	7.0	10	2.9	1.5
23	1.9	3.3	5.5	4.6	4.2	50	50	27	13	18	2.5	1.3
24	1.9	2.7	7.5	5.0	4.1	16	58	24	23	30	2.1	1.2
25	2.8	2.3	5.6	6.2	3.5	13	56	22	17	11	2.1	2.5
26	4.0	6.0	5.0	6.4	3.8	12	54	20	23	9.6	2.5	1.9
27	3.3	5.2	4.7	6.0	4.0	11	50	19	15	7.8	2.7	2.1
28	2.9	4.7	4.5	5.7	3.9	11	60	18	12	6.6	9.1	1.6
29	2.6	4.5	4.6	5.4	3.8	11	77	17	11	5.8	3.5	1.5
30	2.5	5.0	4.7	5.2	-----	12	96	16	19	5.1	2.3	5.8
31	2.4	-----	5.0	5.0	-----	13	-----	22	-----	4.4	1.9	-----
TOTAL	101.1	129.1	202.5	159.7	135.0	332.6	1,034	2,269	464.5	336.9	149.3	57.3
MEAN	3.26	4.00	6.53	5.15	4.66	10.7	34.5	73.2	15.5	10.9	4.62	1.91
MAX	17	6.6	19	7.0	8.0	50	96	240	43	30	14	5.8
MIN	1.3	2.3	4.0	4.4	3.8	4.1	12	16	7.0	4.4	1.9	1.2
CFSM	1.36	1.45	1.73	1.58	1.52	1.20	3.85	8.18	1.73	1.22	1.54	1.21
IN.	1.42	1.50	1.84	1.66	1.56	1.38	4.30	9.43	1.93	1.40	1.62	1.24

CAL YR 1971 TOTAL 44621.62 MEAN 12.7 MAX 260 MIN .63 CFSM 1.42 IN 19.21
WTR YR 1972 TOTAL 54362.00 MEAN 14.7 MAX 240 MIN 1.2 CFSM 1.64 IN 22.29

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	-	4.48	413				

NOTE.--No gage-height record Feb. 16 to Mar. 20, May 3-29.

01141500 Ompemuncie River at Union Village, Vt.

LOCATION.--Lat. 43°47'23", long 72°15'19", Orange County, on right bank 100 ft upstream from covered bridge at Union Village, 0.2 mile downstream from Avery Brook, 0.3 mile downstream from Union Village Reservoir, and 3.8 miles upstream from mouth.

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--September 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 188 cfs (19.64 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,700 cfs Apr. 20 (gage height, 7.22 ft, from peak-stage indicator); minimum, 32 cfs Oct. 5; minimum daily, 34 cfs Oct. 4, 5.

Period of record: Maximum discharge, 4,800 cfs June 3, 1947 (gage height, 9.65 ft), from rating curve extended above 2,400 cfs on basis of stage-area measurement of peak flow; minimum, 1.7 cfs Oct. 14, 1949; minimum daily, 2.0 cfs Oct. 20, 1949. Maximum discharge since construction of Union Village Reservoir in 1949, 2,350 cfs Apr. 20, 1950 (gage height, 7.62 ft); maximum gage height, 7.67 ft Mar. 22, 1968. Maximum stage since at least 1869, about 14.5 ft in November 1927, from information by local resident (discharge not determined).

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow regulated by Union Village Reservoir (see p. 207) since October 1949. Some regulation by Lake Fairlee.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	52	73	95	92	70	300	1,200	308	294	170	131
2	36	60	70	93	84	90	350	1,240	240	211	158	92
3	36	72	56	91	80	150	420	1,210	202	220	186	106
4	36	67	60	105	84	190	290	1,300	185	390	188	95
5	36	82	62	100	94	180	250	304	209	244	156	79
6	37	59	86	90	90	180	250	1,090	189	212	133	76
7	54	75	64	86	84	125	250	1,420	223	142	120	69
8	48	90	75	84	80	107	240	1,490	195	153	124	65
9	42	56	81	84	78	115	230	1,530	200	148	177	71
10	129	38	84	84	78	110	240	1,480	181	141	279	66
11	275	36	142	92	74	110	290	1,290	181	548	201	58
12	149	37	187	94	72	108	300	892	143	295	173	55
13	100	38	181	100	70	104	350	535	132	218	158	55
14	80	36	140	110	90	96	400	480	123	186	143	70
15	64	34	110	130	100	84	340	549	118	168	144	66
16	60	37	120	120	90	97	500	491	151	156	114	56
17	94	37	140	115	82	152	1,000	461	147	145	106	52
18	50	39	150	110	76	449	1,500	443	118	176	109	51
19	64	48	125	105	74	513	1,400	595	112	127	154	55
20	46	55	30	105	72	289	1,000	428	111	197	127	60
21	45	61	90	96	72	255	750	411	105	196	109	50
22	43	84	85	92	74	258	1,450	344	103	257	86	47
23	42	60	75	86	72	493	1,350	301	102	447	80	43
24	41	45	100	86	72	510	1,400	270	252	1,230	77	41
25	60	40	140	90	68	363	1,450	244	238	549	75	41
26	75	46	130	110	62	309	1,250	223	590	378	76	41
27	70	42	120	130	64	291	1,000	207	316	278	155	46
28	60	50	130	130	67	252	900	192	266	239	789	42
29	55	67	120	110	66	247	1,050	174	250	234	285	38
30	52	74	110	90	-----	240	1,250	145	218	218	191	40
31	49	-----	100	90	-----	260	-----	159	-----	146	129	-----
TOTAL	6,011	1,572	3,264	3,107	2,271	6,857	21,720	21,098	5,886	8,621	5,178	1,857
MEAN	64.4	52.4	105	100	78.3	221	724	681	196	274	167	61.9
MAX	275	98	187	130	100	513	1,500	1,530	590	1,230	789	131
MIN	34	36	56	84	66	70	250	145	102	126	75	38
MEAN†	64.8	54.4	109	99.8	77.8	222	723	677	196	278	167	61.8
CFSMT	.30	.42	.84	.77	.60	1.71	5.36	5.21	1.51	2.14	1.28	.48
INT†	.57	.47	.97	.89	.64	1.97	6.20	6.00	1.69	2.47	1.48	.53
CAL YR 1971	TOTAL 41,293	MEAN 164	MAY 1,550	MIN 20	MEAN† 168	CFSMT 1.29	INT 17.53					
2ND YR 1972	TOTAL 83,440	MEAN 228	MAY 1,530	MIN 34	MEAN† 228	CFSMT 1.75	INT 23.88					

† Adjusted for change in contents in Union Village Reservoir.

NOTE.--No gage-height record Dec. 21 to Jan. 19, Mar. 31 to May 1.

CONNECTICUT RIVER BASIN

01141800 Mink Brook near Etna, N.H.

LOCATION.--Lat 43°42'08", long 72°11'15", Grafton County, on left bank 2 miles northeast of Etna and 5 miles east of Hanover.

DRAINAGE AREA.--4.60 sq mi.

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 5.71 cfs (16.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 181 cfs July 11 (gage height, 2.83 ft); minimum, 0.06 cfs Oct. 4-6.

Period of record: Maximum discharge, 515 cfs July 29, 1969 (gage height, 3.71 ft), from rating curve extended above 130 cfs; maximum gage height, 4.19 ft Mar. 26, 1963 (backwater from ice); minimum discharge, 0.01 cfs Aug. 11, 1964.

REMARKS.--Records good except those for periods of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.39	1.9	1.7	1.1	1.2	12	49	13	8.6	3.0	1.5
2	.07	.39	1.6	1.5	1.0	2.0	15	56	6.8	5.1	3.3	1.3
3	.07	.39	1.6	1.8	1.0	4.0	13	47	4.7	11	4.0	1.2
4	.07	.39	1.2	1.6	1.2	3.5	11	50	4.7	13	3.8	1.1
5	.06	.33	1.1	1.4	1.7	2.8	11	63	4.7	6.8	3.0	1.0
6	.08	.33	1.0	1.3	1.5	2.4	15	43	4.0	5.4	2.2	.42
7	.13	.80	1.1	1.2	1.3	2.2	9.1	33	4.7	3.7	2.0	.84
8	.13	.90	1.4	1.2	1.2	2.1	8.1	25	4.4	3.2	2.4	.80
9	.13	.71	1.3	1.4	1.1	2.0	7.6	27	4.0	2.8	2.2	.80
10	1.4	.66	2.4	1.7	1.0	1.9	8.1	22	3.7	4.7	1.4	.71
11	1.8	.62	3.5	2.0	.86	1.8	9.1	18	3.5	4.4	1.6	.66
12	.90	.58	4.5	1.8	.80	1.7	12	16	2.6	12	1.4	.62
13	.62	.56	3.8	1.8	.90	1.6	14	14	2.4	7.6	1.8	.60
14	.54	.55	3.0	4.5	2.0	1.5	11	13	2.1	6.1	2.0	1.2
15	.39	.54	2.4	5.0	4.0	1.5	12	13	1.9	4.7	1.7	1.0
16	.33	.53	2.9	4.0	2.6	1.5	16	15	4.7	3.7	1.6	.40
17	.28	.52	3.5	3.2	2.0	7.0	25	13	3.5	3.2	1.5	1.0
18	.28	.55	3.5	2.8	1.7	25	40	25	2.2	2.4	1.4	.94
19	.33	.60	2.3	2.4	1.5	19	45	16	2.1	2.2	1.3	1.3
20	.33	.74	1.4	2.2	1.4	15	50	13	2.1	2.2	1.2	1.0
21	.28	.68	2.0	2.1	1.3	1.1	34	12	2.1	2.6	1.1	.90
22	.28	.62	1.7	1.9	1.2	16	30	9.6	1.4	2.6	1.0	.80
23	.28	.52	1.5	1.7	1.1	19	32	8.1	4.0	12	.90	.90
24	.28	.45	2.6	1.6	1.0	17	36	6.8	14	2.4	.52	.90
25	.33	.60	2.6	1.8	1.0	13	42	5.7	8.6	8.5	.90	.80
26	.54	1.5	2.4	2.7	.96	1.0	35	4.7	2.4	6.0	2.1	.80
27	.54	1.5	2.4	2.2	.90	9.0	28	4.4	4.6	5.0	2.5	2.1
28	.54	1.5	2.4	2.0	.94	4.6	25	4.0	5.1	6.0	10	1.2
29	.46	1.5	2.4	1.8	1.0	8.6	30	3.5	4.4	7.0	5.0	1.0
30	.39	2.4	2.2	1.6	-----	11	38	3.0	6.4	4.5	2.5	1.1
31	.46	-----	2.0	1.3	-----	9.6	-----	5.1	-----	3.5	1.7	-----
TOTAL	12.40	22.75	69.8	65.2	39.26	234.5	669.0	637.9	163.8	238.3	71.72	29.81
MEAN	.40	.76	2.25	2.10	1.35	7.56	22.3	20.6	5.46	7.69	2.31	.99
MAX	1.4	2.8	4.5	5.0	4.0	25	50	63	26	44	10	2.1
MIN	.06	.33	1.0	1.2	.80	1.2	7.6	3.0	1.8	2.2	.80	.60
CFSM	.09	.17	.49	.46	.29	1.64	4.85	4.48	1.19	1.67	.50	.22
IN.	.10	.18	.56	.53	.32	1.90	5.41	5.16	1.32	1.93	.58	.24
CAL YR 1971	TOTAL 1,901.80	MEAN 5.21	MAX 92	MIN .06	CFSM 1.13	IN 15.38						
WTR YR 1972	TOTAL 2,254.44	MEAN 6.16	MAX 63	MIN .06	CFSM 1.34	IN 16.23						

PEAK DISCHARGE (BASE, 55 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	-	-	†55	6-26	0415	2.24	55
5-2	-	-	†60	7-11	0245	2.83	181
5-5	-	-	†70	7-24	0030	2.44	88

† About.

NOTE.--No gage-height record Nov. 10-25, Nov. 30 to Dec. 23, Dec. 31 to Jan. 19, Jan. 22 to Mar. 23, Apr. 17 to May 5, July 25 to Sept. 21.

CONNECTICUT RIVER BASIN

141

01142500 Ayers Brook at Randolph, Vt.

LOCATION.--Lat 43°56'03", long 72°39'30". Orange County, on right bank 55 ft upstream from bridge on State Highway 12, just north of village limits of Randolph, 0.4 mile upstream from Adams Brook, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--30.5 sq mi.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.75 ft above mean sea level (levels by Corps of Engineers); prior to Oct. 1, 1964, datum was 1.00 ft higher.

AVERAGE DISCHARGE.--33 years, 44.2 cfs (19.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,100 cfs May 4 (gage height, 6.18 ft), from rating curve extended above 500 cfs on basis of contracted-opening measurement at gage height 9.12 ft; minimum, 6.1 cfs Sept. 29.

Period of record: Maximum discharge, 2,280 cfs (revised) June 1, 1952 (gage height, 8.58 ft, present datum), from rating curve extended above 500 cfs on basis of contracted-opening measurement at gage height 9.12 ft; minimum, 0.6 cfs July 27, 1965.

Maximum stage since at least 1830, about 17 ft (present datum) in November 1927.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WSP 1141, 1231, 1271, 1301, 1551, 1701, 1721, 1901 and WRD Mass., N.H., R.I., Vt., 1967.

Water year	Date	Discharge (cfs)	Gage height (feet)	Water year	Date	Discharge (cfs)	Gage height (feet)
1949	Dec. 31, 1948	1,650	*6.41	1958	Dec. 21, 1957	795	*4.37
1952	June 1, 1952	2,280	*7.58	1960	Nov. 28, 1959	1,070	*5.10
1953	Mar. 24, 1953	823	*4.45	1967	Apr. 3, 1967	756	5.22

* Datum then in use.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS.--The figures of peak discharge for water years 1953, 1958 have been revised as shown in the following table. They supersede figures published in WSP 1271, 1551, and 1721.

REVISED PEAK DISCHARGE.--1953: Mar. 24 (2300) 823 cfs (4.45 ft); Mar. 27 (0430) 767 cfs (4.29 ft); Mar. 30 (1215) 732 cfs (4.19 ft). 1958: Dec. 21 (0900) 795 cfs (4.37 ft); Apr. 22 (0300) 767 cfs (4.29 ft).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	22	30	24	25	117	350	63	54	28	13
2	11	15	14	33	24	50	127	400	57	35	27	12
3	11	22	14	34	20	80	115	440	44	40	45	12
4	10	17	19	32	30	48	107	579	42	63	38	12
5	10	16	16	30	28	50	99	525	56	38	28	11
6	10	18	21	26	26	42	99	325	41	32	25	10
7	11	23	26	30	27	32	48	247	40	29	26	9.3
8	10	24	31	30	25	48	89	244	34	26	60	9.6
9	9.5	19	27	30	24	39	87	225	44	25	39	14
10	26	18	29	34	23	34	97	191	37	28	36	11
11	61	19	68	33	23	38	109	163	34	42	28	9.3
12	26	18	64	32	23	38	121	145	30	28	25	8.9
13	21	18	47	30	25	35	133	129	28	24	24	8.8
14	14	16	41	34	45	34	121	118	27	25	25	11
15	17	16	40	28	45	35	117	127	25	23	29	10
16	16	16	91	24	34	36	141	118	38	21	23	8.6
17	15	15	80	27	30	74	264	111	32	21	21	8.0
18	14	16	57	36	27	130	314	99	26	18	22	7.5
19	14	16	44	43	25	88	308	92	24	26	25	8.0
20	14	19	46	44	22	65	376	83	24	39	20	8.7
21	13	18	46	36	25	64	292	82	23	28	18	7.5
22	13	18	33	31	28	83	268	72	22	24	16	7.2
23	13	17	27	37	27	144	271	65	24	94	15	7.4
24	12	12	40	35	24	134	257	58	62	163	16	6.8
25	18	12	50	52	26	105	257	54	46	63	15	7.8
26	23	16	43	41	24	91	248	50	64	55	14	7.8
27	19	20	40	37	23	83	230	47	38	44	14	7.4
28	19	20	43	36	24	77	210	43	34	40	34	6.7
29	16	20	41	33	24	84	240	40	30	38	22	6.3
30	15	22	33	30	-----	99	280	36	33	34	17	9.1
31	14	-----	31	30	-----	91	-----	40	-----	30	14	-----
TOTAL	511.5	528	1,229	1,045	801	2,136	5,632	5,352	1,126	1,250	789	276.7
MEAN	16.5	17.6	39.6	33.7	27.6	68.9	188	173	37.5	40.3	25.5	9.22
MAX	81	24	91	52	45	194	376	579	64	163	60	14
MIN	9.5	18	14	26	22	25	87	36	22	18	14	6.3
CFSM	.54	.58	1.30	1.10	.90	2.26	6.16	5.67	1.23	1.32	.84	.30
IN.	.62	.64	1.50	1.27	.98	2.61	6.87	6.53	1.37	1.52	.96	.34

CAL YR 1971 TOTAL 15,478.2 MEAN 42.4 MAX 508 MIN 3.0 CFSM 1.39 IN 18.88
WTR YR 1972 TOTAL 20,676.2 MEAN 56.5 MAX 579 MIN 6.3 CFSM 1.85 IN 25.22

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-17	2200	4.02	417				
4-20	0330	4.01	414				
5-4	2200	6.18	1,100				

CONNECTICUT RIVER BASIN

01144000 White River at West Hartford, Vt.

LOCATION.--Lat 43°42'51", long 72°25'07", Windsor County, on left bank 700 ft upstream from highway bridge at West Hartford and 7.4 miles upstream from mouth.

DRAINAGE AREA.--690 sq mi.

PERIOD OF RECORD.--June 1915 to current year. October 1927 to September 1928 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 374.53 ft above mean sea level. Prior to Oct. 30, 1927, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--57 years, 1,153 cfs (22.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 22,300 cfs May 5 (gage height, 14.26 ft); minimum, 188 cfs Oct. 6, Sept. 24. Period of record: Maximum discharge, 120,000 cfs Nov. 4, 1927 (gage height, 29.3 ft, from floodmarks), from rating curve extended above 29,000 cfs on basis of slope-area measurement of peak flow; minimum observed, about 35 cfs Aug. 4, 1918; minimum daily, 54 cfs Sept. 27, 28, 1963.

Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1760.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation at low flow during period 1934-50 caused by powerplant above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	275	430	580	640	600	1,900	8,310	1,360	1,200	750	383
2	213	279	390	590	620	950	2,280	9,990	1,520	1,010	653	339
3	207	343	400	750	610	2,000	2,090	10,700	1,320	847	738	314
4	203	383	450	760	600	1,900	1,880	14,200	1,060	1,400	875	306
5	200	335	350	700	580	1,700	1,750	15,600	1,090	1,070	675	302
6	207	310	300	550	540	1,400	1,670	7,910	955	889	582	275
7	219	306	450	500	560	1,100	1,630	7,530	948	757	543	257
8	219	537	1,000	610	520	1,200	1,500	6,180	896	669	746	243
9	203	462	760	590	500	1,200	1,510	5,320	948	693	777	264
10	300	401	840	712	480	950	1,560	4,590	918	633	882	272
11	568	383	1,100	757	470	970	1,750	3,770	812	2,330	681	246
12	657	374	1,900	744	470	1,000	1,820	3,490	718	1,340	570	229
13	467	361	1,500	718	510	930	2,240	3,090	669	940	527	226
14	396	335	1,320	900	620	900	2,220	2,950	639	826	456	236
15	356	306	1,040	950	1,050	900	2,110	3,450	593	744	576	257
16	327	327	1,580	750	1,050	900	2,700	3,300	748	628	522	236
17	306	302	2,270	530	870	1,100	4,750	3,140	940	633	447	219
18	294	306	1,560	680	738	2,900	6,470	2,900	693	565	433	229
19	279	327	850	840	693	2,600	6,380	2,640	616	522	471	229
20	272	374	800	950	663	1,700	8,800	2,280	587	920	457	254
21	260	481	850	820	630	1,600	6,110	2,190	565	770	383	226
22	260	457	750	640	620	1,500	5,040	1,890	532	770	343	213
23	254	405	500	690	620	3,500	5,500	1,650	538	1,580	322	203
24	246	290	750	780	640	3,400	5,880	1,480	1,120	4,420	310	197
25	257	280	1,100	810	640	2,300	6,000	1,300	1,230	2,480	327	197
26	339	260	900	1,200	620	1,900	5,410	1,200	1,400	2,090	318	200
27	378	410	900	1,000	600	1,700	4,740	1,120	1,120	1,560	371	215
28	339	476	850	950	600	1,500	4,130	1,010	910	1,270	1,450	232
29	314	457	1,000	900	600	1,500	4,890	925	798	1,100	812	203
30	294	405	760	720	-----	1,650	6,180	833	744	978	538	203
31	283	-----	500	700	-----	1,700	-----	840	-----	833	438	-----
TOTAL	9,746	10,947	28,150	23,371	18,354	49,150	110,790	135,978	26,987	36,467	18,053	7,409
MEAN	314	365	908	754	633	1,585	3,693	4,386	900	1,176	582	247
MAX	968	537	2,270	1,200	1,050	3,500	8,800	15,600	1,520	4,420	1,450	383
MIN	200	260	300	500	470	600	1,500	833	532	522	310	197
CFSM	.46	.53	1.32	1.09	.92	2.30	5.35	6.36	1.30	1.70	.84	.36
IN.	.53	.59	1.52	1.26	.99	2.65	5.67	7.33	1.45	1.97	.67	.40

CAL YR 1971 TOTAL 378,411 MEAN 1,037 MAX 12,900 MIN 119 CFSM 1.50 IN 20.40
WTR YR 1972 TOTAL 475,402 MEAN 1,299 MAX 15,600 MIN 197 CFSM 1.88 IN 25.63

PEAK DISCHARGE (BASE, 11,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0200	14.26	22,300				

CONNECTICUT RIVER BASIN

143

01144500 Connecticut River at White River Junction, Vt.

LOCATION.--Lat 43°38'49", long 72°18'53", Windsor County, on right bank 50 ft downstream from railroad bridge at White River Junction, 500 ft downstream from White River, and at mile 215.0.

DRAINAGE AREA.--4,092 sq mi.

PERIOD OF RECORD.--October 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 321.52 ft above mean sea level. Prior to June 16, 1918, nonrecording gage on downstream side of pier of railroad bridge 50 ft upstream at same datum. June 16, 1918, to Nov. 2, 1930, nonrecording gage at various locations on upstream and downstream sides of railroad bridge at same datum.

AVERAGE DISCHARGE.--61 years, 7,017 cfs (23.29 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 62,000 cfs May 5 (gage height, 21.70 ft); minimum daily, 250 cfs Oct. 3, 9.
Period of record: Maximum discharge, 136,000 cfs Nov. 4, 1927 (gage height, 35.0 ft, present site), from rating curve extended above 70,000 cfs; minimum daily, 82 cfs Aug. 8, 1965.
Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1760.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, Union Village Reservoir (see p. 207), and other reservoirs (combined usable capacity, about 17.2 billion cubic feet).

REVISIONS (WATER YEARS).--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,320	2,640	2,880	650	3,900	3,560	10,600	28,300	7,810	1,860	4,600	4,600
2	655	4,190	2,970	2,500	3,200	4,210	11,600	36,500	8,240	3,180	4,600	1,530
3	250	2,840	3,320	5,200	3,300	6,530	9,410	42,200	9,960	4,430	6,000	368
4	2,060	2,800	1,130	5,000	3,400	6,820	11,700	50,500	11,600	4,570	6,800	334
5	3,240	3,060	1,490	4,300	3,200	4,740	11,300	57,800	7,190	7,230	5,500	2,490
6	4,490	1,420	3,140	4,000	1,700	4,340	9,380	55,500	8,780	6,390	3,500	3,450
7	4,170	1,290	3,230	3,800	4,400	6,390	10,400	54,600	8,030	5,630	4,600	1,750
8	3,600	3,970	4,810	1,400	4,000	4,820	6,600	50,200	7,840	3,800	4,700	1,850
9	250	3,740	4,480	1,700	4,500	5,560	4,450	44,900	8,620	1,880	4,200	1,000
10	1,500	2,670	5,640	3,900	4,600	6,680	5,920	40,000	9,530	3,700	5,500	2,940
11	5,600	3,180	3,870	3,400	4,000	2,190	9,070	33,700	8,160	7,880	6,200	1,040
12	6,000	2,960	5,590	3,010	2,300	4,050	28,800	9,640	8,450	3,200	1,710	1,710
13	4,500	1,310	6,940	3,530	550	3,300	10,300	24,900	8,960	8,220	1,700	1,860
14	4,200	909	5,270	3,600	3,700	3,970	11,500	18,400	7,930	6,670	4,200	2,700
15	3,900	3,360	4,360	3,400	4,300	5,400	10,800	21,800	7,510	3,370	4,000	2,580
16	1,270	2,510	7,080	2,400	3,600	4,480	10,700	24,800	7,540	2,040	4,500	627
17	1,230	2,680	5,600	4,300	3,800	5,640	15,300	25,300	7,750	5,090	3,300	3,000
18	3,310	2,070	4,130	5,300	3,000	9,030	23,000	24,300	5,570	5,480	3,800	1,500
19	3,610	3,580	3,500	4,300	2,200	12,000	26,100	22,400	6,880	5,520	2,330	1,600
20	2,450	2,140	5,540	5,500	1,700	10,900	31,300	20,400	7,200	5,290	1,880	1,900
21	2,260	1,040	4,730	4,000	3,300	10,400	30,200	18,800	6,490	6,960	3,750	1,600
22	2,260	4,420	5,280	2,600	2,700	11,000	28,100	14,800	5,390	8,240	4,090	2,300
23	2,250	4,090	4,450	2,000	2,800	12,900	26,400	11,300	4,000	7,800	2,190	600
24	1,790	3,630	2,350	5,600	2,800	14,100	26,600	9,770	3,660	12,500	3,460	640
25	1,990	295	3,280	5,700	2,700	14,000	27,600	10,300	4,950	12,700	3,580	1,600
26	4,950	1,330	3,140	5,000	3,100	11,800	26,300	9,920	5,130	9,670	720	1,150
27	4,630	1,900	5,260	4,700	1,400	11,900	24,000	4,350	6,730	7,650	2,400	1,900
28	4,640	1,130	6,060	4,500	3,500	10,400	20,300	2,990	6,000	8,800	8,020	2,300
29	5,060	3,330	6,560	3,300	2,520	9,350	21,200	3,300	5,280	7,800	5,400	1,450
30	470	3,910	6,450	1,900	-----	10,600	23,400	5,460	4,060	3,900	3,970	1,310
31	305	-----	2,800	3,600	-----	10,100	-----	6,170	-----	7,000	3,020	-----
TOTAL	89,210	78,384	135,370	114,090	90,170	239,330	504,580	802,460	216,430	193,700	126,210	53,678
MEAN	2,878	2,613	4,367	3,680	3,109	7,720	16,820	25,890	7,214	6,248	4,071	1,789
MAX	6,000	4,420	7,080	5,700	4,600	14,100	31,300	57,800	11,600	12,700	8,020	4,600
MIN	250	295	1,130	650	550	2,190	4,450	2,990	3,660	1,860	720	334
MEAN†	2,531	2,274	3,809	3,283	2,361	6,644	16,820	29,600	7,237	6,415	3,579	1,389
CFSM†	.62	.56	.93	.80	.58	1.62	4.11	7.23	1.77	1.57	.87	.34
IN.†	.71	.62	1.07	.93	.62	1.87	4.59	8.34	1.97	1.81	1.01	.38

CAL YP 1971 TOTAL 2,192,915 MEAN 6,008 MAX 43,200 MIN 170 MEAN† 5,983 CFSM† 1.46 IN† 19.85
WTO YP 1972 TOTAL 2,643,613 MEAN 7,223 MAX 57,800 MIN 250 MEAN† 7,191 CFSM† 1.76 IN† 23.93

PEAK DISCHARGE (BASE, 34,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0300	21.70	62,000				

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and Union Village Reservoir.

CONNECTICUT RIVER BASIN

01145000 Mascoma River at West Canaan, N.H.

LOCATION.--Lat 43°39'00", long 72°04'50", Grafton County, on right bank 45 ft downstream from Boston and Maine Railroad bridge, 0.9 mile east of West Canaan, 1.2 miles downstream from Indian River, 3.5 miles west of Canaan, and at mile 19.3.

DRAINAGE AREA.--80.5 sq mi.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 114 cfs (19.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs May 5 (gage height, 5.43 ft); minimum, 6.4 cfs Oct. 6, 7.
Period of record: Maximum discharge, 3,780 cfs Mar. 27, 1953 (gage height, 8.94 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement at gage height 9.6 ft; minimum, 2.9 cfs Aug. 8, 17, 18, 19, 1965.
Flood in September 1938 reached a stage of 9.6 ft, from floodmarks (discharge, 4,310 cfs, from rating curve extended above 1,900 cfs as explained above).

REMARKS.--Records good except those for winter period or periods of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 1901: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	22	35	30	28	28	150	824	150	71	65	33
2	7.7	21	32	29	27	50	180	989	400	63	56	27
3	7.2	22	29	28	28	80	200	796	200	56	59	25
4	6.9	23	26	27	30	100	170	863	150	97	63	23
5	6.6	22	24	26	42	80	160	1,160	110	73	49	21
6	6.6	21	26	25	39	60	150	804	98	56	42	19
7	7.7	22	28	25	35	50	135	678	110	49	37	17
8	8.3	25	32	24	33	45	125	540	94	43	36	15
9	7.7	30	36	24	30	40	119	500	94	36	35	15
10	14	28	43	24	29	37	114	420	116	36	34	15
11	126	27	50	23	28	35	128	360	105	473	29	13
12	58	26	80	22	27	34	145	310	79	425	26	13
13	35	24	65	21	26	33	198	270	64	140	26	12
14	26	23	50	25	35	32	183	240	54	101	24	15
15	24	21	46	45	60	32	172	230	48	80	30	23
16	22	21	43	40	90	31	214	250	61	73	30	19
17	21	20	54	37	70	60	386	270	88	89	24	16
18	19	20	40	32	57	100	636	220	59	64	23	19
19	18	21	30	30	48	350	661	190	48	58	24	20
20	18	24	35	29	41	300	903	150	48	183	21	28
21	17	23	40	28	38	240	776	170	45	134	19	22
22	17	22	32	27	35	210	570	150	40	443	18	18
23	16	19	27	29	34	280	536	130	104	344	16	16
24	16	17	31	32	33	240	580	110	252	808	15	15
25	20	17	36	37	31	200	699	95	239	654	15	18
26	25	20	45	45	30	180	640	80	188	329	49	17
27	35	24	41	40	29	160	521	72	136	212	33	21
28	31	25	38	36	29	150	425	63	104	149	122	22
29	28	25	35	33	28	140	442	57	80	120	88	18
30	25	27	33	30	-----	150	629	53	63	98	54	18
31	23	-----	32	28	-----	140	-----	50	-----	78	40	-----
TOTAL	700.7	682	1,194	931	1,090	3,667	10,991	11,094	3,431	5,635	1,204	573
MEAN	22.6	22.7	38.5	30.0	37.6	118	366	358	114	182	38.8	19.1
MAX	126	30	80	45	90	350	903	1,160	400	808	122	33
MIN	6.6	17	24	21	26	28	116	50	40	36	15	12
CFSM	.28	.28	.48	.37	.47	1.47	4.55	4.45	1.42	2.26	.48	.24
IN.	.32	.32	.55	.43	.50	1.69	5.08	5.13	1.59	2.60	.56	.26
CAL YR 1971	TOTAL 31,291.8	MEAN 85.7	MAX 1,310	MIN 5.7	CFSM 1.06	IN 14.46						
WTR YR 1972	TOTAL 41,192.7	MEAN 113	MAX 1,160	MIN 6.6	CFSM 1.40	IN 19.04						

PEAK DISCHARGE (BASE, 950 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0830	5.43	1,270				
7-24	1830	4.93	1,030				

NOTE.--No gage-height record Oct. 14 to Nov. 17, May 8 to June 5.

CONNECTICUT RIVER BASIN

145

01150500 Mascoma River at Mascoma, N.H.

LOCATION.--Lat 43°39'01", long 72°11'05", Grafton County, on left bank at Mascoma, 250 ft downstream from railroad bridge, 1,000 ft downstream from outlet of Mascoma Lake, and 9.9 miles upstream from mouth.

DRAINAGE AREA.--153 sq mi.

PERIOD OF RECORD.--August 1923 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

AVERAGE DISCHARGE.--49 years, 210 cfs (18.64 inches per year), adjusted for storage since October 1928.

EXTREMES.--Current year: Maximum discharge, 1,770 cfs May 5 (gage height, 4.17 ft); minimum daily, 25 cfs Nov. 20 to Dec. 5.
Period of record: Maximum discharge, 5,840 cfs Mar. 19, 1936 (gage height, 7.50 ft), from rating curve extended above 2,500 cfs on basis of computations of flow over dams at gage heights 6.85 and 7.50 ft; minimum daily, 2 cfs Feb. 3, 1939, Sept. 1, 1940.

REMARKS.--Records excellent except those for period of no gage-height record, which are good. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p. 207).

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 801: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	59	25	71	137	86	353	980	168	231	253	50
2	63	59	25	70	131	89	353	1,120	443	43	133	50
3	63	59	25	71	127	131	366	1,260	411	57	79	50
4	62	59	25	70	127	163	375	1,320	326	68	80	50
5	62	59	25	69	121	161	375	1,530	190	86	83	50
6	61	58	26	65	117	153	366	1,700	199	95	83	50
7	61	58	26	63	115	149	357	1,470	141	96	83	48
8	59	58	26	63	111	140	335	1,320	127	101	82	48
9	59	52	27	69	104	133	317	1,220	129	95	80	47
10	59	36	28	78	97	127	300	1,110	131	96	79	46
11	61	36	28	80	86	123	287	998	135	443	77	45
12	62	36	35	100	73	119	287	830	158	681	75	45
13	62	36	47	110	71	115	313	575	193	575	75	45
14	62	36	59	119	75	113	339	380	168	193	74	45
15	62	36	68	131	81	113	357	291	151	313	74	45
16	62	36	71	142	99	137	371	313	142	190	74	164
17	62	36	76	144	119	193	429	326	135	77	72	159
18	62	36	86	144	123	214	520	321	133	84	72	157
19	62	32	86	142	127	353	701	260	117	91	72	155
20	61	25	86	144	125	470	1,020	214	67	102	71	152
21	61	25	81	144	119	545	1,210	214	70	143	57	152
22	59	25	81	147	115	615	1,230	205	70	264	41	150
23	59	25	77	147	110	580	1,180	151	74	326	41	150
24	59	25	70	144	104	575	1,110	147	205	470	41	148
25	59	25	73	144	99	565	1,080	140	175	769	41	148
26	61	25	74	144	99	540	1,110	92	474	974	41	145
27	61	25	73	147	95	500	1,130	55	470	776	42	148
28	61	25	79	147	91	456	1,080	57	429	614	42	145
29	61	25	73	147	89	420	956	58	386	382	45	144
30	61	25	70	144	-----	393	490	61	344	293	47	143
31	61	-----	76	142	-----	371	-----	67	-----	271	47	-----
TOTAL	1,493	1,152	1,727	3,551	3,087	8,842	19,247	18,785	6,539	9,055	2,256	3,018
MEAN	61.1	38.4	55.7	115	106	285	642	606	218	202	72.8	101
MAX	63	59	86	147	137	615	1,230	1,700	470	974	253	164
MIN	59	25	25	63	71	86	287	55	67	57	41	45
MEAN†	36.4	35.3	81.8	60.9	70.4	306	805	634	187	302	56.2	17.9
CFSMT	.24	.23	.54	.40	.46	2.00	5.26	4.14	1.22	1.97	.37	.12
IN.†	.27	.26	.62	.46	.50	2.30	5.87	4.78	1.37	2.28	.42	.13

CAL YR 1971 TOTAL 56,976 MEAN 156 MAX 1,480 MIN 25 MEAN† 161 CFSMT 1.05 IN† 14.31
WTR YR 1972 TOTAL 70,152 MEAN 216 MAX 1,700 MIN 25 MEAN† 216 CFSMT 1.41 IN† 19.26

† Adjusted for change in contents in Mascoma and Crystal Lakes and Goose and Grafton Ponds.
NOTE.--No gage-height record Dec. 12 to Jan. 11.

CONNECTICUT RIVER BASIN

01150800 Kent Brook near Sherburne, Vt.

LOCATION.--Lat 43°40'24", long 72°48'33", Rutland County, on left bank 40 ft downstream from bridge on State Highway 100, 1.4 miles upstream from mouth, and 2 miles northwest of Sherburne.

DRAINAGE AREA.--3.31 sq mi.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map). Prior to Sept. 13, 1967, at site 25 ft upstream at same datum.

AVERAGE DISCHARGE.--9 years, 7.52 cfs (30.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 460 cfs May 4 (gage height, 4.00 ft), from rating curve extended above 140 cfs on basis of measurement of flow through culvert at gage height 3.44 ft; minimum, 1.3 cfs Sept. 10-13, 24-26.
Period of record: Maximum discharge, 460 cfs May 4, 1972 (gage height, 4.00 ft), from rating curve extended above 140 cfs on basis of measurement of flow through culvert at gage height 3.44 ft; maximum gage height, 4.42 ft Apr. 3, 1967, at former site; minimum discharge, 0.27 cfs Aug. 7, 8, 1965.

REMARKS.--Records good except those for winter period, which are fair. Recording rain gage at station since April 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.8	5.1	5.6	4.3	4.0	8.6	110	11	11	3.3	2.0
2	1.7	4.4	4.8	6.2	4.0	6.0	8.2	140	9.5	6.5	3.5	1.8
3	1.7	4.0	4.4	6.5	4.0	9.0	7.2	110	7.0	7.7	4.9	1.8
4	1.5	3.2	4.0	5.6	4.5	6.5	6.6	164	6.2	9.5	4.4	2.0
5	1.4	2.8	3.6	5.3	3.7	5.0	6.4	63	6.0	6.0	3.5	2.0
6	1.7	2.8	3.6	4.8	3.4	4.2	6.6	34	5.1	5.4	3.0	2.7
7	1.8	9.0	13	4.3	3.4	3.7	7.2	50	6.2	4.6	2.8	2.4
8	1.8	5.3	9.7	4.0	3.2	3.9	6.6	27	7.0	4.2	2.8	1.5
9	1.8	4.2	9.3	4.0	3.0	3.4	5.9	24	7.7	4.1	2.8	1.6
10	12	3.6	16	5.0	3.0	3.6	5.6	19	6.2	6.2	2.8	1.4
11	9.0	3.6	22	6.0	3.0	3.8	5.9	18	5.1	14	3.0	1.3
12	4.8	3.6	14	6.6	3.0	3.8	6.9	16	4.9	6.2	2.5	1.3
13	3.8	3.6	10	8.0	3.0	3.6	7.5	15	4.2	4.9	2.5	1.5
14	3.4	3.8	8.6	7.0	4.5	3.5	8.2	16	3.7	6.0	3.0	2.0
15	3.4	4.0	7.2	6.2	3.7	3.5	7.2	24	4.2	3.3	3.0	1.9
16	3.0	3.4	16	5.6	3.4	3.6	12	25	12	3.2	2.3	1.6
17	2.8	3.2	13	5.5	3.2	5.0	26	39	6.8	6.0	2.3	1.5
18	2.6	3.2	10	7.6	3.1	12	24	26	5.1	2.8	2.2	1.9
19	2.6	3.6	9.0	7.9	3.0	10	38	17	4.4	3.5	2.3	2.4
20	2.6	5.9	8.5	7.9	2.9	7.5	32	15	4.6	3.9	2.0	1.8
21	2.6	4.8	8.2	6.9	2.8	6.5	18	14	3.9	6.5	1.9	1.4
22	2.6	4.6	8.0	6.0	2.7	8.0	16	11	5.1	3.3	1.8	1.5
23	2.6	3.8	7.0	7.0	2.6	20	27	9.8	9.1	18	1.9	1.4
24	2.6	3.6	10	6.8	2.5	14	32	8.7	11	11	2.2	1.3
25	4.4	3.5	8.2	9.0	2.4	11	29	7.7	10	11	7.3	1.3
26	4.6	6.0	7.2	8.0	2.5	9.0	24	6.8	9.8	9.1	3.7	2.0
27	3.6	5.1	6.8	7.2	2.6	8.2	21	6.5	7.0	7.0	11	4.4
28	3.2	4.0	8.6	6.4	2.6	7.2	22	6.0	7.0	5.7	8.0	2.2
29	3.2	4.0	6.9	5.7	2.6	6.9	32	5.4	4.6	4.6	3.9	1.6
30	2.8	5.6	6.2	5.1	-----	6.9	34	4.9	9.5	4.1	2.8	3.5
31	2.8	-----	5.8	4.7	-----	6.9	-----	5.7	-----	3.7	2.4	-----
TOTAL	100.2	125.2	274.3	192.4	92.6	210.5	511.6	1,040.5	203.9	203.0	105.8	57.0
MEAN	3.23	4.17	8.85	6.21	3.19	6.79	17.1	33.6	6.80	6.55	3.41	1.90
MAX	12	9.0	22	9.0	4.5	20	54	164	12	18	11	4.4
MIN	1.4	2.8	3.6	4.0	2.4	3.4	5.6	4.9	3.7	2.8	1.8	1.3
CFSM	.98	1.26	2.67	1.88	.96	2.05	5.17	10.2	2.05	1.98	1.03	.57
IN.	1.13	1.41	3.08	2.16	1.04	2.37	5.75	11.69	2.29	2.28	1.19	.64

CAL YR 1971 TOTAL 2,679.39 MEAN 7.34 MAX 62 MIN .83 CFSM 2.22 IN 30.11
WTR YR 1972 TOTAL 3,117.00 MEAN 8.52 MAX 164 MIN 1.3 CFSM 2.57 IN 35.03

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	1745	4.00	460				
5-17	1645	2.36	97				

CONNECTICUT RIVER BASIN

147

01151500 Ottauquechee River at North Hartland, Vt.

LOCATION.--Lat 43°36'09", long 72°21'17", Windsor County, on left bank 100 ft upstream from highway bridge at North Hartland, 0.3 mile downstream from North Hartland Dam, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--221 sq mi.

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 336.77 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--42 years, 381 cfs (23.41 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,080 cfs May 1 (gage height, 7.32 ft); minimum, 8.0 cfs Sept. 22; minimum daily, 16 cfs Oct. 6. Period of record: Maximum discharge, 24,400 cfs Sept. 21, 1938 (gage height, 17.68 ft), from rating curve extended above 6,200 cfs on basis of computations of flow over dams at gage heights 15.58, 17.68, and 21.5 ft; minimum, 2.9 cfs July 31, 1933; minimum daily, 3.8 cfs July 3, 1933. Maximum discharge since construction of North Hartland Dam in March 1961, 5,930 cfs Apr. 26, 1969 (gage height, 8.52 ft). Maximum stage since at least 1760, 21.5 ft in November 1927, from floodmarks (discharge, 30,400 cfs, by computation of peak flow over dam).

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated by powerplants above station and by North Hartland Reservoir (see p. 207) since March 1961; greater regulation by powerplants prior to 1958. Small seasonal storage in reservoir at Plymouth.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	112	130	215	190	145	624	2,900	505	541	265	142
2	60	142	93	220	190	280	764	3,320	578	446	256	119
3	52	117	93	239	185	500	682	2,050	402	368	256	69
4	59	106	121	243	190	460	620	857	349	507	450	46
5	50	96	106	237	190	380	560	670	349	508	290	73
6	16	69	91	205	175	310	542	1,700	348	315	201	86
7	72	93	117	175	175	260	520	2,880	319	220	184	85
8	76	121	263	180	165	270	474	2,980	256	222	167	85
9	66	109	233	175	155	240	472	3,110	261	258	175	85
10	142	102	260	220	155	230	512	3,090	325	322	182	61
11	342	103	381	237	150	230	571	3,190	303	1,900	165	33
12	182	103	596	238	145	245	623	2,460	250	656	127	35
13	152	97	393	230	140	247	764	1,550	195	490	111	54
14	117	69	313	305	165	237	860	940	166	400	148	78
15	94	60	269	280	225	232	790	1,010	191	351	165	89
16	71	94	410	210	215	235	931	1,040	231	292	138	84
17	84	62	666	200	186	312	1,820	1,640	280	271	121	89
18	84	69	418	205	170	731	2,580	1,330	277	271	121	89
19	87	68	226	230	165	604	2,380	1,200	224	247	121	89
20	126	93	266	235	155	429	1,750	997	191	256	121	88
21	140	102	300	210	145	421	1,330	966	191	280	107	88
22	136	108	273	190	150	445	2,620	787	191	311	100	146
23	132	100	175	200	145	917	2,460	467	165	620	57	193
24	128	62	234	240	145	753	2,690	77	300	1,200	55	188
25	140	80	393	270	145	587	2,770	237	460	800	66	163
26	163	77	307	400	140	507	2,520	442	534	900	79	180
27	152	117	312	290	140	467	1,920	383	407	600	86	175
28	138	128	307	280	140	435	1,520	356	299	450	486	172
29	130	128	342	250	140	474	1,810	356	272	500	227	168
30	123	121	271	210	-----	563	2,220	354	271	500	101	162
31	117	-----	180	205	-----	516	-----	352	-----	320	144	-----
TOTAL	3,495	3,000	8,535	7,224	4,770	12,662	40,699	43,691	9,090	15,322	5,272	3,241
MEAN	113	100	275	233	164	408	1,357	1,409	303	494	170	108
MAX	342	128	666	400	225	917	2,770	3,320	578	1,900	486	193
MIN	16	62	91	175	140	145	472	77	165	220	55	33
MEAN†	113	100	276	233	164	410	1,354	1,446	303	494	173	75.7
CFSM†	.51	.45	1.23	1.05	.74	1.86	6.13	6.54	1.37	2.24	.78	.34
IN.†	.59	.50	1.44	1.21	.80	2.14	6.84	7.55	1.53	2.58	.90	.38

CAL YR 1971 TOTAL 147,492 MEAN 349 MAX 3,280 MIN 16 MEAN† 349 CFSM† 1.58 IN† 21.46
 WTR YR 1972 TOTAL 157,001 MEAN 429 MAX 3,320 MIN 16 MEAN† 430 CFSM† 1.95 IN† 26.47

† Adjusted for change in contents in North Hartland Reservoir.

CONNECTICUT RIVER BASIN

01152500 Sugar River at West Claremont, N.H.

LOCATION.--Lat 43°23'15", long 72°21'45", Sullivan County, on right bank 0.2 mile downstream from Redwater Brook at West Claremont, and 2.4 miles upstream from mouth.

DRAINAGE AREA.--269 sq. mi.

PERIOD OF RECORD.--May 1928 to current year. Published as "at Claremont" prior to October 1928.

GAGE.--Water-stage recorder. Datum of gage is 358.78 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1928, nonrecording gage at site 0.8 mile upstream at different datum.

AVERAGE DISCHARGE.--44 years, 390 cfs (19.69 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 3,910 cfs about Apr. 20 (gage height, 5.65 ft, from peak-stage indicator); minimum daily, 39 cfs Nov. 25. Period of record: Maximum discharge, 14,000 cfs Mar. 19, 1936 (gage height, 10.92 ft), from rating curve extended above 6,700 cfs on basis of computations of flow over dam at gage heights 10.49 and 10.92 ft; maximum gage height, 11.80 ft Mar. 12, 1936 (ice jam); minimum daily discharge, 14 cfs Aug. 26, 1965.

REMARKS.--Records excellent except those for winter period, which are good, and those for period of no gage-height record, which are fair. Regulation by Sunapee Lake 25 miles upstream (see p. 207) and at low flow by mills above station.

REVISIONS (WATER YEARS).--WSP 711: 1930(M). WSP 756: Drainage area. WSP 1901: 1960 (adjusted figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	56	50	93	152	145	155	757	2,350	966	774	228
2	55	47	80	209	136	275	907	2,540	823	670	158
3	55	58	93	239	130	378	901	2,380	550	567	170
4	53	50	93	185	137	403	818	3,490	432	663	170
5	55	55	90	152	145	359	762	3,140	390	535	159
6	55	65	95	135	160	319	733	2,310	314	374	140
7	55	72	108	137	150	295	662	1,910	287	285	132
8	50	82	118	143	140	278	585	1,670	265	237	126
9	52	84	129	146	130	277	551	1,780	282	206	124
10	86	80	140	168	120	248	550	1,630	255	191	124
11	192	90	217	188	115	233	609	1,280	228	1,050	116
12	178	80	339	178	115	213	690	1,200	200	743	109
13	126	68	287	181	115	213	955	963	183	464	108
14	108	63	236	411	210	205	1,180	846	166	385	105
15	98	62	202	460	403	194	1,100	935	154	344	106
16	90	65	202	326	398	204	1,400	950	189	290	103
17	84	65	256	259	334	390	2,200	944	229	664	98
18	67	67	255	263	289	1,170	3,000	1,060	185	547	98
19	67	65	140	236	245	1,300	3,000	799	169	439	58
20	70	63	192	220	217	1,050	3,700	658	167	409	52
21	70	65	178	188	200	857	3,400	709	154	391	88
22	58	70	149	174	185	972	2,900	605	148	361	82
23	58	72	108	178	170	1,490	2,600	470	316	578	76
24	65	46	152	178	160	1,460	2,600	408	723	595	76
25	70	39	217	198	195	1,210	2,500	357	883	652	75
26	78	55	239	231	155	1,050	2,300	310	1,360	581	73
27	82	74	209	220	150	919	1,970	275	1,040	487	73
28	78	80	188	207	145	844	1,690	247	754	414	98
29	63	82	192	177	145	804	1,790	222	632	346	123
30	58	93	174	163	-----	821	2,040	200	574	298	86
31	53	-----	159	157	-----	761	-----	230	-----	266	72
TOTAL	2,385	2,007	5,370	6,459	5,299	19,347	48,650	36,868	13,018	14,806	3,526
MEAN	76.9	66.9	173	208	183	624	1,628	1,189	434	478	114
MAX	192	93	339	460	403	1,490	3,700	3,490	1,360	1,050	228
MIN	50	39	80	135	115	155	550	200	148	191	72
MEAN†	51.9	64.2	194	245	186	639	1,700	1,227	471	444	76.4
CFSM†	.19	.24	.72	.91	.69	2.38	6.32	4.56	1.75	1.65	.28
IN.†	.22	.27	.83	1.05	.74	2.74	7.05	5.26	1.95	1.90	.33
CAL YR 1971	TOTAL 120,648	MEAN 331	MAX 3,610	MIN 39	MEAN† 327	CFSM† 1.22	IN† 16.49				
WTR YR 1972	TOTAL 159,828	MEAN 437	MAX 3,700	MIN 39	MEAN† 444	CFSM† 1.65	IN† 22.45				

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20*	-	5.65	3,910				
5-4	0730	5.56	3,770				

* About.

† Adjusted for change in contents in Sunapee Lake.
NOTE.--No gage-height record Apr. 15-26.

CONNECTICUT RIVER BASIN

149

01153000 Black River at North Springfield, Vt.

LOCATION.--Lat 43°20'00", long 72°30'55", Windsor County, on right bank at North Springfield, 800 ft downstream from North Springfield Dam, 1,300 ft upstream from Great Brook, and 8.1 miles upstream from mouth.

DRAINAGE AREA.--158 sq mi.

PERIOD OF RECORD.--October 1929 to current year. October 1929 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 445.79 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--43 years, 275 cfs (23.64 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 3,470 cfs May 10 (gage height, 6.61 ft); minimum daily, 34 cfs Nov. 5, Sept. 29, 30.
Period of record: Maximum discharge, 15,500 cfs Sept. 22, 1938 (gage height, 17.68 ft), from rating curve extended above 3,200 cfs on basis of computations of flow over dams at gage heights 16.41 and 17.68 ft; minimum daily, 8.0 cfs July 8, 1962. Maximum discharge since construction of North Springfield Dam in 1960, 3,550 cfs Apr. 11, 1962 (gage height, 6.43 ft); maximum gage height, 6.61 ft May 10, 1972.

REMARKS.--Records excellent. Flow regulated by mills above station and by North Springfield Reservoir (see p. 207) since November 1960.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	40	81	125	125	110	428	2,130	466	680	186	104
2	40	38	66	129	125	197	576	2,460	453	699	156	122
3	40	40	55	147	131	358	515	1,320	353	384	181	142
4	40	39	70	154	131	385	464	532	273	451	239	72
5	40	34	49	140	130	310	394	514	258	461	210	52
6	40	37	52	120	125	281	379	1,580	230	298	165	55
7	40	38	67	110	125	230	368	2,330	220	263	155	51
8	40	45	106	117	115	225	337	2,340	209	242	127	44
9	40	43	122	102	110	210	327	2,600	239	211	130	50
10	40	43	137	121	105	175	340	2,990	227	174	137	47
11	40	43	236	133	93	170	388	1,840	193	1,350	123	44
12	76	50	347	138	95	171	458	1,350	170	1,550	115	41
13	132	46	274	140	94	166	601	1,080	152	566	115	40
14	165	43	220	166	138	166	803	773	94	442	94	48
15	162	42	186	179	206	152	724	666	62	316	84	56
16	162	41	269	150	193	172	839	863	184	286	84	53
17	161	39	419	125	154	229	1,650	1,580	306	240	88	45
18	216	40	305	132	154	636	2,200	1,880	149	230	88	34
19	242	46	190	150	144	550	2,230	1,750	142	190	88	52
20	228	47	163	145	125	366	1,390	1,120	157	171	88	58
21	99	43	180	142	110	325	895	844	168	196	73	54
22	52	53	161	132	115	354	1,730	667	167	186	49	49
23	39	55	57	137	110	839	1,970	530	217	364	49	44
24	38	43	130	168	110	707	2,180	409	483	553	49	40
25	43	47	261	190	109	504	2,190	372	597	599	49	38
26	50	39	205	270	110	419	2,080	310	745	878	49	41
27	51	66	196	220	105	368	1,680	279	709	698	49	41
28	48	67	182	212	107	335	1,100	246	371	441	49	36
29	42	72	210	189	108	348	1,180	166	333	358	45	34
30	42	75	176	155	-----	406	1,470	185	320	282	46	34
31	38	-----	123	148	-----	366	-----	183	-----	206	67	-----
TOTAL	2,526	1,394	5,335	4,686	3,602	10,230	31,866	35,889	8,647	13,965	3,227	1,623
MEAN	81.5	46.5	172	151	124	330	1,062	1,158	288	450	104	54.1
MAX	242	75	419	270	206	839	2,230	2,990	745	1,550	239	142
MIN	38	34	49	102	93	110	327	166	62	171	45	34
MEAN†	54.9	46.7	173	151	124	330	1,093	1,129	295	448	110	43.2
CFSM†	.35	.30	1.09	.96	.78	2.09	6.92	7.15	1.87	2.84	.70	.27
IN.†	.40	.33	1.26	1.10	.85	2.41	7.72	8.24	2.08	3.27	.80	.31

CAL YR 1971 TOTAL 91,778 MEAN 251 MAX 2,470 MIN 24
WTR YR 1972 TOTAL 122,990 MEAN 336 MAX 2,990 MIN 34

† Adjusted for change in contents in North Springfield Reservoir.

CONNECTICUT RIVER BASIN

0153500 Williams River at Brockways Mills, Vt.

LOCATION.--Lat 43°12'31", long 72°31'05", Windham County, on left bank 25 ft upstream from highway bridge at Brockways Mills, 4 miles downstream from Hall Brook, 4.6 miles upstream from mouth, and 6 miles northwest of Bellows Falls.

DRAINAGE AREA.--103 sq mi.

PERIOD OF RECORD.--June 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 163 cfs (21.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,820 cfs May 17 (gage height, 8.47 ft); minimum, 12 cfs Oct. 6.

Period of record: Maximum discharge, 8,910 cfs June 1, 1952 (gage height, 13.39 ft), from rating curve extended above 3,300 cfs on basis of slope-area measurement at gage height 13.31 ft; minimum not determined, occurred Dec. 11, 1941, during period of ice effect; minimum daily, 3.6 cfs Aug. 27, 1949.

Flood in September 1938 had greatest discharge since at least 1753 (gage height, 22.7 ft, from floodmarks). Flood in November 1927 reached a stage possibly 2 ft higher than that of September 1938 flood because of backwater from mill dam, from information by local residents.

REMARKS.--Records good except those for winter period and period of doubtful or no gage-height record, which are fair. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	44	75	61	72	353	1,380	491	712	57	23
2	14	21	35	84	60	150	435	1,340	281	383	50	21
3	13	27	43	110	57	280	343	1,100	192	298	58	22
4	13	25	42	100	62	240	346	1,650	159	350	60	20
5	13	23	35	92	64	200	290	1,230	149	243	46	19
6	13	21	41	80	58	160	276	786	129	213	40	17
7	13	23	50	72	53	140	259	723	149	180	38	16
8	13	32	75	70	60	135	225	628	140	162	45	18
9	13	25	67	65	53	130	223	1,110	225	169	40	18
10	17	26	77	80	51	120	249	728	164	145	39	19
11	123	25	195	90	46	110	284	536	131	304	35	16
12	93	24	238	86	42	110	353	459	110	186	31	13
13	35	24	137	82	45	105	470	369	97	146	31	17
14	30	21	103	140	110	98	648	346	90	139	33	36
15	27	21	92	110	160	100	521	498	81	120	44	44
16	24	24	266	90	110	100	761	556	202	107	35	29
17	23	22	255	75	90	230	1,730	2,370	179	122	36	24
18	21	25	149	90	74	500	1,710	1,290	116	101	37	21
19	20	25	78	95	68	360	1,900	710	132	91	39	42
20	20	27	98	77	66	246	2,070	576	139	195	33	45
21	19	27	125	68	64	214	1,180	548	110	130	27	30
22	20	30	106	68	66	290	876	412	103	106	24	24
23	19	24	60	67	64	750	1,110	333	320	308	23	22
24	19	17	174	77	63	480	1,410	281	719	180	25	20
25	24	16	235	105	62	343	1,240	244	468	150	25	20
26	32	24	161	200	62	284	1,010	200	637	186	23	19
27	26	35	122	93	62	243	827	176	333	124	22	19
28	26	36	136	85	54	223	791	156	266	96	27	18
29	24	35	148	71	60	237	990	183	236	76	30	17
30	22	38	103	65	-----	284	1,140	118	564	64	26	14
31	21	-----	80	63	-----	259	-----	159	-----	56	24	-----
TOTAL	801	764	3,572	2,725	1,951	7,193	24,002	21,195	7,132	9,842	1,103	687
MEAN	25.8	25.5	115	87.9	67.3	232	800	684	238	188	35.6	22.9
MAX	123	38	268	200	160	750	2,070	2,370	719	712	60	45
MIN	13	16	35	63	42	72	223	118	81	56	22	15
CFSM	2.25	2.25	1.12	0.85	0.65	2.25	7.77	6.64	2.31	1.83	0.35	0.22
IN.	0.29	0.28	1.29	0.98	0.70	2.60	8.67	7.65	2.58	2.11	0.40	0.25

CAL YR 1971 TOTAL 53,799.9 MEAN 147 MAX 1,670 MIN 6.8 CFSM 1.43 IN 19.43
WTR YR 1972 TOTAL 76,967.0 MEAN 210 MAX 2,370 MIN 13 CFSM 2.04 IN 27.80

PEAK DISCHARGE (BASE, 2,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2230	7.64	3,120				
5-4	2000	7.00	2,610				
5-17	0430	8.47	3,820				

NOTE.--Doubtful or no gage-height record Aug. 18 to Sept. 30.

CONNECTICUT RIVER BASIN

151

01154000 Saxtons River at Saxtons River, Vt.

LOCATION.--Lat 43°08'14", long 72°29'17", Windham County, on right bank 130 ft upstream from highway bridge, 0.8 mile east of Saxtons River, 1.4 miles upstream from Bundy Brook, and 3.9 miles upstream from mouth.

DRAINAGE AREA.--72.2 sq mi.

PERIOD OF RECORD.--June 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 114 cfs (21.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,190 cfs Apr. 19 (gage height, 7.61 ft); minimum, 7.1 cfs Oct. 6, 9.
Period of record: Maximum discharge, 5,610 cfs Sept. 12, 1960 (gage height, 11.57 ft); from rating curve extended above 2,000 cfs on basis of slope-area measurements at gage heights 10.51 and 11.37 ft; minimum, 1.9 cfs July 25, 1949; minimum daily, 2.4 cfs Aug. 6, 1955.
Maximum stage since at least 1869, 17.9 ft in September 1938, from floodmarks (discharge not determined).

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow prior to 1962; fluctuation more frequent prior to 1946.

REVISIONS (WATER YEARS).--WSP 1301: 1948-49(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	16	43	55	45	55	286	814	318	495	27	13
2	8.0	17	33	60	47	120	310	846	188	254	25	12
3	7.7	20	37	82	44	250	273	825	134	229	30	12
4	8.8	18	35	75	47	210	240	1,250	120	280	29	12
5	7.7	16	30	68	50	170	216	835	110	183	23	10
6	7.4	15	33	60	45	150	210	534	95	156	21	9.8
7	7.7	19	40	55	41	130	200	473	120	127	21	9.1
8	8.4	22	66	52	45	115	180	440	104	114	28	8.9
9	7.7	19	56	50	41	105	180	793	142	105	24	9.9
10	48	18	57	58	35	100	199	520	106	89	21	9.5
11	92	18	142	66	35	96	216	376	88	84	15	8.5
12	41	17	196	64	32	92	260	314	75	70	17	8.2
13	28	17	111	62	35	88	352	269	67	62	17	10
14	23	15	80	110	110	86	460	234	63	61	22	23
15	20	16	78	85	130	86	384	355	56	55	28	28
16	18	19	217	70	90	88	500	313	83	48	20	17
17	17	19	225	56	72	210	1,180	509	88	57	15	14
18	15	20	141	70	58	420	1,150	544	64	45	15	12
19	14	20	81	85	54	280	1,360	336	65	39	15	26
20	14	22	61	80	52	200	1,410	293	71	54	18	29
21	14	22	92	70	50	180	788	290	59	47	14	18
22	14	25	69	62	51	230	600	222	56	38	12	17
23	13	19	42	56	50	469	757	185	101	171	12	13
24	14	17	124	54	49	376	976	160	322	97	12	12
25	14	16	161	65	49	274	824	138	281	69	13	11
26	31	25	114	130	48	229	663	121	415	61	12	12
27	24	34	98	90	48	203	540	108	214	50	23	12
28	20	30	107	78	47	186	502	98	173	42	23	11
29	18	29	110	58	45	199	611	86	136	35	24	11
30	17	38	90	54	-----	215	693	75	442	31	17	15
31	16	-----	60	51	-----	224	-----	117	-----	28	14	-----
TOTAL	602.2	618	2,859	2,123	1,553	6,036	16,520	12,473	4,356	3,276	681	414.0
MEAN	19.4	20.6	92.2	68.5	53.6	195	551	402	145	106	21.3	13.0
MAX	92	38	225	130	130	669	1,410	1,250	442	495	53	29
MIN	7.4	15	30	50	32	55	180	75	56	28	12	8.2
CFSM	.27	.29	1.28	.95	.74	2.70	7.62	5.57	2.01	1.47	.30	.19
IN.	.91	.92	1.47	1.09	.80	3.11	8.51	6.43	2.74	1.69	.34	.21

CAL YR 1971 TOTAL 37,088.1 MEAN 102 MAX 1,130 MIN 3.2 CFSM 1.41 IN 19.11
WTR YR 1972 TOTAL 51,491.2 MEAN 141 MAX 1,410 MIN 7.4 CFSM 1.95 IN 26.53

PEAK DISCHARGE (BASE, 1,750 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2030	7.61	2,190				

CONNECTICUT RIVER BASIN

01154500 Connecticut River at North Walpole, N.H.

LOCATION.--Lat 43°07'34", long 72°26'14", Cheshire County, on left bank at North Walpole, 100 ft upstream from Saxtons River, 0.7 mile downstream from Villas Bridge between Bellows Falls, Vt., and North Walpole, N.H., and at mile 172.5. Records include flow of Saxtons River.

DRAINAGE AREA.--5,493 sq mi, includes that of Saxtons River.

PERIOD OF RECORD.--March 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 218.63 ft above mean sea level.

AVERAGE DISCHARGE.--30 years, 8,959 cfs (22.15 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 72,700 cfs May 5 (gage height, 25.33 ft); minimum daily, 199 cfs Oct. 3.

Period of record: Maximum discharge, 97,000 cfs Mar. 27, 1953 (gage height, 30.37 ft); minimum daily, 115 cfs Aug. 31, 1952, Sept. 2, 1957.

Maximum stage since at least 1750, 43.8 ft Mar. 19, 1936, from floodmarks.

REMARKS.--Records excellent except those for winter period, and periods of no gage-height record, which are good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 207), and other reservoirs (combined usable capacity, about 24.8 billion cubic feet).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,580	3,660	3,200	1,320	4,500	3,800	16,000	34,900	10,100	6,100	6,300	3,700
2	1,550	2,590	3,300	3,160	4,500	5,400	18,000	49,700	12,800	6,100	5,430	3,900
3	199	3,420	3,070	4,990	4,200	7,800	15,100	52,400	12,200	7,000	6,360	1,050
4	2,800	3,100	2,630	6,360	4,800	8,400	17,300	41,200	14,000	6,800	7,080	305
5	3,850	3,950	1,460	6,030	4,200	7,800	15,900	70,100	11,800	7,800	7,000	2,200
6	3,780	2,230	4,020	4,880	1,100	5,800	13,800	65,600	9,000	9,800	4,550	2,500
7	3,600	1,260	4,210	4,610	5,600	6,400	14,600	67,600	10,800	6,600	5,210	1,900
8	4,640	4,120	4,810	2,400	4,500	6,500	12,600	63,900	9,360	5,200	5,200	3,000
9	2,370	3,940	4,780	2,150	5,200	6,700	9,850	59,400	9,080	4,700	4,900	1,300
10	1,740	3,410	7,000	4,980	4,800	6,400	9,030	54,200	11,200	4,500	4,370	2,000
11	4,940	3,630	5,450	4,620	4,800	4,800	11,400	46,500	10,500	10,500	6,540	1,800
12	7,780	3,310	6,460	4,290	3,800	3,810	13,500	34,700	9,650	12,500	4,400	1,700
13	5,920	2,420	4,180	4,500	2,200	4,200	15,800	35,900	9,740	10,500	1,900	2,130
14	4,770	1,500	7,600	5,190	4,000	4,570	18,600	22,400	4,630	11,000	4,800	3,200
15	4,790	3,610	4,500	5,300	4,800	6,330	17,700	24,400	8,300	5,800	4,500	2,600
16	1,720	2,880	6,570	4,270	5,800	6,050	17,800	29,500	8,300	3,800	3,800	1,900
17	1,130	2,870	9,070	5,280	4,800	7,370	29,500	34,400	9,200	6,600	3,600	2,100
18	3,620	2,160	8,450	5,660	5,100	10,700	37,700	34,900	7,800	6,800	4,100	1,900
19	3,380	4,060	4,510	6,850	3,780	19,600	42,200	30,100	7,500	7,000	2,300	2,900
20	4,090	2,670	5,870	6,500	2,800	15,900	50,300	26,700	7,600	6,000	2,100	2,600
21	3,080	1,780	6,560	5,990	2,600	14,300	43,800	24,200	7,200	6,600	4,200	1,900
22	3,010	4,730	5,940	5,700	3,000	15,300	42,000	20,700	7,500	8,500	4,600	1,600
23	2,610	4,770	4,440	3,170	3,100	21,500	40,200	15,500	4,300	10,500	2,100	1,700
24	2,540	4,220	3,830	5,080	3,800	22,700	41,500	12,600	7,000	13,000	3,500	1,400
25	2,240	422	4,770	7,250	3,900	21,200	42,700	12,000	7,800	14,000	4,800	2,300
26	5,400	2,040	4,430	6,700	3,400	17,900	40,100	11,900	10,500	13,000	2,500	1,900
27	5,230	2,240	6,150	7,170	1,400	16,300	35,900	4,450	10,400	11,000	1,500	2,700
28	4,940	567	6,250	5,790	4,300	14,800	30,500	5,580	9,600	10,000	7,200	2,300
29	6,170	3,740	8,350	5,970	3,300	12,800	30,000	4,780	7,000	9,600	4,600	1,620
30	1,240	5,280	8,980	2,240	-----	15,400	33,600	6,670	6,800	7,000	5,000	1,800
31	761	-----	4,910	5,290	-----	14,800	-----	6,880	-----	7,400	3,100	-----
TOTAL	106,510	90,939	173,750	154,050	114,000	336,130	775,980	1,034,840	276,760	256,700	139,540	63,905
MEAN	3,436	3,031	5,605	4,969	3,931	10,840	25,070	33,380	9,225	8,281	4,501	2,130
MAX	7,780	5,280	9,180	7,250	5,800	22,700	50,300	70,100	14,000	16,000	7,200	3,900
MIN	199	567	1,460	1,320	1,100	3,400	9,030	4,780	4,300	3,800	1,500	305
MEAN†	3,013	2,687	5,096	4,555	3,149	9,804	26,130	37,170	9,260	8,422	3,963	1,564
CFSM†	.55	.49	.93	.83	.57	1.78	4.76	6.77	1.69	1.53	.72	.28
IN.†	.63	.55	1.07	.96	.62	2.06	5.31	7.80	1.88	1.77	.83	.32

CAL YR 1971 TOTAL 2,921,898 MEAN 8,005 MAX 57,300 MIN 174 MEAN† 7,981 CFSM† 1.45 IN† 19.73

WTR YR 1972 TOTAL 3,523,024 MEAN 9,626 MAX 70,100 MIN 199 MEAN† 9,599 CFSM† 1.75 IN† 23.79

PEAK DISCHARGE (BASE, 44,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1400	20.63	52,100				
5-5	1230	25.33	72,700				

† Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to North Springfield Reservoir on Black River listed on page 207.

M Expressed in thousands.

NOTE.--No gage-height record June 15-26, June 28 to Aug. 1, Aug. 8, 9, Aug. 12 to Sept. 3, Sept. 5-12, 14-28, 30.

01155000 Cold River at Drewsville, N.H.

LOCATION.--Lat 43°02'54", long 72°23'23", Cheshire County, on left bank 50 ft upstream from bridge on State Highway 123 at Drewsville, 1.0 mile upstream from Great Brook, 2.7 miles east of Bellows Falls, Vt., and 3.4 miles upstream from mouth.

DRAINAGE AREA.--82.7 sq mi.

PERIOD OF RECORD.--June 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 112 cfs (18.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,710 cfs Apr. 18 (gage height, 6.67 ft); minimum, 8.4 cfs Nov. 24.
Period of record: Maximum discharge, 8,160 cfs Nov. 26, 1950 (gage height, 10.29 ft), from rating curve extended above 3,400 cfs; minimum, 1.3 cfs Sept. 23, 1940.

REMARKS.--Records excellent except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1945.

REVISIONS (WATER YEARS).--WSP 1431: 1952(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	FEET	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Aug	SEP
1	10	13	36	54	54	59	268	553	832	129	22	16
2	9.6	14	21	58	56	106	341	545	468	99	20	14
3	9.3	15	27	75	53	190	335	1,170	288	96	23	13
4	9.3	15	28	75	62	190	289	1,040	251	165	23	12
5	9.3	14	19	68	67	140	257	679	226	106	19	11
6	11	20	19	50	68	116	239	495	159	85	17	10
7	12	20	30	48	54	114	227	401	165	67	16	9.6
8	17	27	44	50	52	109	196	536	146	56	18	10
9	11	21	42	51	52	108	184	582	204	48	17	10
10	36	19	50	82	47	100	188	430	152	42	21	10
11	74	20	98	89	40	90	213	371	120	40	19	9.3
12	40	17	119	89	38	82	257	315	98	38	19	8.9
13	28	16	87	91	40	77	405	261	86	34	18	10
14	27	14	69	230	110	74	516	258	78	35	19	21
15	15	15	63	170	190	74	516	410	69	32	15	34
16	17	16	93	110	140	75	1,030	369	80	29	17	21
17	17	14	137	90	106	255	1,170	418	90	117	16	16
18	15	15	56	80	95	630	1,190	400	69	66	15	16
19	15	15	50	80	77	530	1,500	306	67	45	15	27
20	14	15	67	90	80	388	1,000	305	65	39	13	41
21	14	16	68	85	78	322	742	289	61	34	12	28
22	14	18	51	77	65	360	755	223	56	30	11	23
23	13	15	31	81	63	670	876	173	97	115	13	19
24	13	11	70	75	60	504	873	145	177	96	11	17
25	15	11	117	100	60	384	712	121	162	62	10	16
26	19	17	101	110	56	307	572	104	230	68	21	15
27	17	22	85	105	57	254	472	94	149	53	23	15
28	16	24	78	100	56	220	476	81	103	42	159	14
29	15	24	77	96	55	229	517	69	80	34	58	13
30	14	37	64	86	-----	252	538	62	95	27	28	14
31	13	-----	56	61	-----	225	-----	311	-----	24	20	-----
TOTAL	594.5	530	1,993	2,704	2,040	7,234	16,854	11,516	4,926	1,953	732	493.8
MEAN	17.9	17.7	64.3	87.2	70.3	233	562	371	164	63.0	23.6	16.5
MAX	75	37	137	230	190	670	1,500	1,170	832	165	159	41
MIN	9.3	11	19	48	38	49	184	62	56	24	10	8.5
CFSM	.22	.21	.78	1.05	.85	2.82	6.80	4.49	1.98	.76	.29	.20
IN.	.25	.24	.90	1.22	.92	3.25	7.58	5.18	2.22	.88	.33	.22
CAL YR 1971	TOTAL 34,753.7	MEAN 95.2	MAX 582	MIN 7.9	CFSM 1.15	IN 15.63						
WYR YR 1972	TOTAL 91,530.3	MEAN 141	MAX 1,500	MIN 8.9	CFSM 1.71	IN 23.18						

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-18	2315	6.67	1,710				
5-3	1045	6.46	1,540				
6-1	0615	5.88	1,140				

CONNECTICUT RIVER BASIN

01155200 Sacketts Brook near Putney, Vt.

LOCATION.--Lat 42°59'57", long 72°31'59", Windham County, on left bank 50 ft upstream from highway bridge on Saxtons River Road and 1.8 miles north of Putney.

DRAINAGE AREA.--10.0 sq mi.

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 14.7 cfs (19.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 296 cfs Apr. 19 (gage height, 4.87 ft), from rating curve extended above 88 cfs; minimum, 2.3 cfs Oct. 9, 10.

Period of record: Maximum discharge, 946 cfs July 29, 1969 (gage height, 6.89 ft), from rating curve extended above 88 cfs; minimum, 0.63 cfs Sept. 20, 21, 1964.

REMARKS.--Records good except those for winter period, which are fair. Recording rain gage at station since April 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.9	1.0	7.6	6.8	9.0	50	52	60	54	5.4	5.8
2	3.2	4.4	7.0	8.2	6.5	17	55	61	25	36	5.1	4.4
3	3.0	4.8	8.0	11	6.0	29	49	90	21	48	6.4	3.9
4	3.0	4.1	6.0	10	8.0	30	45	108	23	48	6.1	3.6
5	3.0	4.1	4.0	9.2	7.0	19	41	71	22	37	5.8	3.4
6	3.0	4.4	9.0	8.2	6.0	18	43	54	19	33	4.8	3.2
7	2.7	4.4	12	7.6	5.5	16	42	49	20	28	5.8	3.0
8	2.7	4.8	8.3	7.2	5.5	15	37	56	16	25	6.4	3.0
9	2.3	4.4	7.4	7.0	5.0	14	37	90	19	23	4.8	3.0
10	1.8	4.4	7.9	6.0	5.0	13	41	58	15	21	4.4	3.0
11	7.2	4.1	16	9.2	5.0	12	42	49	13	15	4.1	3.0
12	5.1	4.1	14	8.5	5.5	12	49	43	12	13	4.1	2.7
13	4.1	4.0	11	8.5	7.0	11	54	37	12	13	4.1	3.2
14	3.9	3.5	10	15	20	11	41	35	11	13	4.4	5.0
15	3.9	3.9	12	12	16	11	65	66	10	12	4.8	4.3
16	4.1	4.4	24	9.5	14	11	46	49	14	11	4.1	3.5
17	3.6	4.5	21	7.8	12	30	108	44	12	12	4.4	3.0
18	3.4	4.7	16	10	11	60	150	48	9.7	9.7	4.4	2.7
19	3.6	4.9	13	12	11	35	104	37	9.2	9.2	4.4	3.6
20	3.6	5.2	14	11	10	28	100	38	9.7	9.2	3.9	3.6
21	3.6	5.5	14	10	9.5	25	120	38	12	8.3	3.4	3.2
22	3.6	6.0	12	8.5	9.2	35	95	31	9.2	7.4	3.2	2.7
23	3.9	4.5	9.0	7.8	9.0	100	120	20	11	15	3.0	2.7
24	3.2	3.8	15	7.5	9.0	50	115	23	29	10	3.0	3.0
25	6.4	3.5	18	9.0	9.0	40	43	21	35	7.9	3.0	3.0
26	6.1	5.5	14	18	9.0	33	76	20	42	7.4	3.4	3.6
27	5.1	8.0	12	13	8.5	29	65	18	25	7.1	9.2	3.2
28	4.4	7.0	15	10	8.0	27	61	16	21	6.1	10	2.7
29	4.4	6.8	14	8.0	8.5	29	58	15	25	5.8	4.8	2.7
30	4.1	8.0	11	7.4	-----	31	54	14	70	5.4	5.4	3.2
31	3.9	-----	8.2	7.0	-----	35	-----	36	-----	5.4	5.8	-----
TOTAL	137.3	145.6	372.8	293.7	252.5	835.0	2,346	1,393	631.8	555.9	151.9	100.9
MEAN	4.43	4.65	12.0	9.47	8.71	26.9	78.2	44.9	21.1	17.9	4.90	3.36
MAX	18	6.0	24	18	20	100	184	108	70	54	10	5.8
MIN	2.3	3.5	4.0	7.0	5.0	9.0	37	14	9.2	5.4	3.0	2.7
CFSM	4.44	4.49	1.20	.95	.87	2.69	7.82	4.49	2.11	1.79	.49	.34
IN.	.51	.54	1.39	1.09	.94	3.11	8.73	5.18	2.35	2.07	.57	.38

CAL YR 1971 TOTAL 5,211.5 MEAN 14.3 MAX 126 MIN 1.4 CFSM 1.43 IN 19.39
WTR YR 1972 TOTAL 7,216.4 MEAN 19.7 MAX 184 MIN 2.3 CFSM 1.97 IN 26.85

PEAK DISCHARGE (BASE, 210 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	1945	4.87	296				
6-30	1600	4.48	219				

CONNECTICUT RIVER BASIN

155

01155300 Flood Brook near Londonderry, Vt.

LOCATION.--Lat 43°14'11", long 72°51'23", Windham County, on left bank 20 ft downstream from bridge on State Highway 11, 0.9 mile upstream from Burnt Meadow Brook, and 2.5 miles west of Londonderry.

DRAINAGE AREA.--9.25 sq mi.

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 20.0 cfs (29.36 inches per year).

EXTREMES.--Current year: Maximum discharge, 444 cfs May 4 (gage height, 5.18 ft), from rating curve extended above 220 cfs as explained below; maximum gage height, 5.73 ft Mar. 3 (backwater from ice); minimum discharge, 1.5 cfs Nov. 14, Sept. 1, 2, 8, 9, 12, 13.

Period of record: Maximum discharge, 1,060 cfs (revised) Aug. 23, 1966 (gage height, 6.33 ft), from rating curve extended above 220 cfs on basis of culvert measurements at gage heights 6.33 ft and 7.15 ft; maximum gage height, 7.44 ft, from peak-stage indicator, Mar. 18, 1968 (ice jam); minimum discharge, 0.19 cfs Aug. 10-12, 1964.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WSP 1901 and WRD Mass., N.H., R.I., Vt., 1964, 1966-70.

Water year	Date	Discharge (cfs)	Gage height (feet)	Water year	Date	Discharge (cfs)	Gage height (feet)
1964	Apr. 14, 1964	606	5.56	1968	Apr. 25, 1968	560	5.46
1966	Aug. 23, 1966	1,060	6.33	1969	Apr. 10, 1969	681	5.71
1967	Apr. 3, 1967	499	5.32	1970	Apr. 24, 1970	524	5.38

REMARKS.--Records good except those for winter period or period of no gage-height record, which are fair. Occasional regulation by small pond above station. Recording rain gage at station since April 1964 (no winter records).

REVISIONS.--The figures of peak discharge for water years 1968-69 have been revised as shown in the following table. They supersede figures published in WRD Mass., N.H., R.I., Vt., 1968-69.

REVISED PEAK DISCHARGE.--1968: Mar. 24, about 470 cfs; Apr. 25 (0230) 560 cfs (5.46 ft).

1969: Nov. 29 (0815) 355 cfs (4.94 ft); Apr. 10 (1900) 681 cfs (5.71 ft); Apr. 19 (0630) 453 cfs (5.21 ft); Apr. 23 (0245) 457 cfs (5.22 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.9	7.0	11	10	16	18	24.3	84	65	7.3	1.6
2	1.2	4.6	6.0	13	9.5	26	23	231	39	38	6.4	1.5
3	1.7	6.1	5.2	18	9.0	45	22	207	23	31	9.1	1.6
4	1.7	4.8	5.0	15	10	35	19	297	20	39	9.3	1.9
5	1.7	4.1	5.2	13	9.2	28	15	145	20	23	6.4	1.9
6	1.6	3.7	6.5	11	8.5	20	14	127	17	19	5.3	1.7
7	3.1	6.3	25	10	8.0	16	14	152	26	14	4.8	1.6
8	2.3	13	20	9.5	7.8	14	17	114	28	14	6.2	1.6
9	2.0	12	18	12	7.5	13	14	150	90	24	5.3	1.9
10	17	4.1	26	20	7.3	12	12	94	45	15	7.3	2.1
11	26	2.3	35	17	6.2	11	13	65	29	56	4.8	1.8
12	11	2.1	39	15	6.8	11	17	57	20	23	4.1	1.6
13	7.5	2.1	25	13	7.0	10	23	54	16	15	4.0	2.0
14	5.1	2.3	16	27	20	10	41	49	14	14	6.4	5.3
15	5.2	2.7	16	18	14	10	31	76	11	11	6.8	5.0
16	4.6	6.1	7.3	13	10	10	48	87	48	9.1	4.3	3.0
17	4.2	6.2	49	11	5.5	15	120	161	31	11	5.0	2.3
18	3.9	14	25	14	7.7	45	136	95	18	7.7	5.2	2.2
19	3.7	12	27	21	7.4	35	209	56	51	7.0	5.0	14
20	3.3	12	22	17	7.2	25	193	46	38	7.7	3.8	6.2
21	3.3	9.2	18	14	6.8	18	97	44	24	6.2	3.2	3.7
22	3.1	6.1	14	12	6.6	15	66	33	24	5.2	3.1	3.4
23	3.1	6.6	9.0	11	6.3	55	66	20	64	58	2.8	3.0
24	3.0	5.0	15	11	6.3	46	129	14	197	26	3.4	2.4
25	6.1	4.0	35	25	6.3	30	122	16	98	17	3.1	2.3
26	7.5	4.5	26	37	6.3	23	90	14	102	47	2.8	2.4
27	6.1	5.5	18	22	6.3	19	74	12	50	30	3.4	2.8
28	5.0	6.2	28	15	6.1	17	80	10	34	17	4.8	2.2
29	4.4	7.0	21	13	6.3	17	124	4.5	22	11	3.4	2.2
30	4.1	9.0	16	12	-----	17	163	7.3	59	9.1	2.0	2.8
31	3.9	-----	12	11	-----	18	-----	22	-----	7.5	1.7	-----
TOTAL	100.2	189.5	658.9	441.5	239.3	664	2,030	2,776.8	1,342	677.5	150.5	88.0
MEAN	3.17	6.32	21.2	15.5	8.25	21.4	67.7	89.6	44.7	21.9	4.85	2.93
MAX	26	14	73	37	20	55	209	297	197	65	9.3	14
MIN	1.7	2.1	5.0	9.5	6.1	10	12	7.3	11	5.2	1.7	1.5
CFSH	5.6	6.8	2.29	1.68	8.9	2.31	7.32	9.69	4.63	2.37	5.2	3.2
IN.	6.4	7.6	2.64	1.94	9.6	2.87	8.16	11.17	5.40	2.72	6.1	3.5

CAL YR 1971 TOTAL 6,984.95 MEAN 19.1 MAX 181 MIN .42 CFSH 2.06 IN 24.09
WTR YR 1972 TOTAL 9,456.20 MEAN 25.8 MAX 297 MIN 1.5 CFSH 2.79 IN 38.03

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2015	5.01	382	5-4	1715	5.18	444
5-1	1700	5.03	389	6-24	1230	4.76	300

NOTE.--No gage-height record Mar. 8 to Apr. 5.

CONNECTICUT RIVER BASIN

01155500 West River at Jamaica, Vt.

LOCATION.--Lat 43°06'32", long 72°46'33", Windham County, on left bank 0.2 mile upstream from highway bridge at Jamaica, 0.4 mile upstream from Ball Mountain Brook, 2.8 miles downstream from Ball Mountain Dam, and at mile 26.2.

DRAINAGE AREA.--179 sq mi.

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

AVERAGE DISCHARGE.--26 years, 343 cfs (26.02 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,400 cfs May 10 (gage height, 8.72 ft); minimum, 26 cfs Sept. 16; minimum daily, 28 cfs Sept. 16-18. Period of record: Maximum discharge, 29,500 cfs Dec. 31, 1948 (gage height, 14.87 ft), from rating curve extended above 9,800 cfs, verified by slope-area measurement of peak flow; minimum, 0.94 cfs Sept. 23-25, 1968; minimum daily, 0.94 cfs Sept. 23, 24, 1968. Maximum discharge since construction of Ball Mountain Dam in 1961, 5,020 cfs Apr. 24, 1962 (gage height, 8.75 ft); maximum gage height, 9.46 ft Feb. 4, 1970 (ice jam).

REMARKS.--Records excellent except those for winter period, which are poor. Flow regulated by Ball Mountain Reservoir since 1961 (see p. 207).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	63	130	190	180	190	366	2,800	738	1,380	88	57
2	32	62	125	240	175	430	461	3,290	1,040	953	76	57
3	32	63	94	350	170	800	482	3,350	537	569	88	56
4	32	74	90	400	180	800	412	1,740	336	637	88	56
5	32	90	100	350	190	550	327	617	294	518	87	55
6	32	63	110	180	190	400	295	1,050	254	387	87	55
7	32	53	110	175	185	330	245	1,400	279	312	87	54
8	32	61	350	170	180	240	255	2,160	306	224	88	54
9	263	105	544	170	170	310	230	3,090	595	222	88	53
10	295	128	340	250	140	310	281	4,030	634	243	87	53
11	40	114	468	400	130	280	306	3,140	450	246	86	53
12	427	36	703	420	140	260	353	1,560	364	339	86	52
13	511	68	622	390	140	235	487	1,700	262	358	85	52
14	211	56	379	330	250	250	797	1,920	234	238	85	54
15	41	56	257	500	350	290	757	1,750	182	153	85	40
16	42	57	459	350	290	250	705	1,650	258	127	71	28
17	42	73	1,150	250	260	250	1,870	2,440	410	117	54	28
18	50	107	696	280	240	600	2,730	3,060	372	116	34	28
19	66	119	335	290	230	800	2,930	1,630	284	121	34	30
20	52	144	180	320	210	600	1,950	836	371	182	34	29
21	43	146	250	300	205	370	1,170	791	425	207	33	29
22	44	145	240	200	200	320	2,290	653	342	126	31	29
23	43	139	170	250	195	900	2,340	436	590	191	33	29
24	44	79	190	350	150	1,000	2,640	395	2,180	400	34	29
25	43	64	642	350	185	700	2,760	291	2,150	432	44	29
26	67	65	902	600	185	450	2,580	209	1,850	569	59	29
27	94	95	587	550	180	390	1,790	217	1,060	496	59	29
28	66	135	376	350	170	340	1,180	202	633	252	59	29
29	58	140	412	290	150	340	1,160	180	438	160	58	29
30	64	135	365	240	-----	350	1,470	144	568	130	58	30
31	63	-----	230	210	-----	370	-----	139	-----	130	57	-----
TOTAL	2,932	2,784	11,626	9,685	5,660	13,685	36,072	46,470	18,411	10,535	2,045	1,235
MEAN	94.6	92.6	375	312	195	441	1,202	1,499	614	340	66.0	41.2
MAX	511	140	1,150	600	350	1,000	2,930	4,030	2,180	1,380	88	57
MIN	32	53	90	170	130	190	230	139	182	116	33	28
MEAN†	72.0	89.4	375	314	195	442	1,269	1,464	619	334	63.6	36.0
CFSMT	.40	.50	2.09	1.75	1.09	2.47	7.09	8.18	3.46	1.87	.36	.20
IN.†	.46	.56	2.41	2.02	1.17	2.85	7.91	9.43	3.86	2.15	.41	.22
CAL YR 1971 TOTAL	114,436	MEAN 314	MAX 3,240	MIN 20	MEAN† 314	CFSMT 1.75	INT† 23.79					
WTR YR 1972 TOTAL	161,140	MEAN 440	MAX 4,030	MIN 28	MEAN† 440	CFSMT 2.46	INT† 33.47					

† Adjusted for change in contents in Ball Mountain Reservoir.

CONNECTICUT RIVER BASIN

157

01156000 West River at Newfane, Vt.

LOCATION (revised).--Lat 42°59'43", long 72°38'13". Windham County, on left bank 400 ft downstream from highway bridge, 1 mile northeast of Newfane, and at mile 12.7. Prior to Aug. 22, 1972, on right bank 600 ft downstream from highway bridge.

DRAINAGE AREA.--308 sq mi.

PERIOD OF RECORD.--September 1919 to September 1923, October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 384.21 ft above mean sea level. Prior to June 27, 1931, nonrecording gage at site 600 ft upstream, and June 27, 1931, to Aug. 21, 1972, water-stage recorder on right bank 600 ft downstream from highway bridge at same datum.

AVERAGE DISCHARGE.--48 years, 604 cfs (26.63 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 7,040 cfs May 11 (gage height, 8.94 ft); minimum, 39 cfs Sept. 28; minimum daily, 41 cfs Sept. 29, 30.

Period of record: Maximum discharge, 52,300 cfs Sept. 21, 1938 (gage height, 22.81 ft, from floodmarks), from rating curve extended above 20,000 cfs on basis of contracted-opening measurement at gage height 19.3 ft and slope-area measurements at gage heights 19.46 and 22.81 ft; minimum, 7.6 cfs Aug. 24, 25, 26, 1962; minimum daily, 8.2 cfs Aug. 25, 1962. Maximum discharge since construction of Ball Mountain and Townshend Reservoirs in 1961, 9,410 cfs Apr. 10, 1969 (gage height, 9.77 ft).

Maximum discharge since at least 1869, that of Sept. 21, 1938. Flood of Nov. 3, 1927, reached a discharge of 45,000 cfs (gage height, 23.0 ft, from floodmarks, at nonrecording-gage site), from rating curve extended above 20,000 cfs on basis of computation of peak flow over dam at West Dummerston, about 5 miles downstream, adjusted for flow from intervening area.

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated since 1961 by Ball Mountain Reservoir and Townshend Reservoir 6.8 miles upstream (see p. 207).

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	106	237	356	330	290	702	4,900	997	2,640	173	82
2	56	108	185	392	310	430	907	5,800	1,710	1,850	129	77
3	55	118	175	536	293	830	972	5,960	977	995	127	77
4	54	119	160	558	300	1,100	840	3,590	629	1,390	135	74
5	58	135	140	491	310	1,100	669	1,380	551	1,080	127	72
6	60	137	154	307	310	700	598	2,200	508	713	122	72
7	57	103	231	321	300	580	585	3,230	900	611	121	72
8	56	124	401	289	290	640	530	3,580	523	479	132	72
9	95	125	668	301	270	600	476	4,660	735	397	135	72
10	115	176	462	590	250	550	504	5,980	1,030	398	126	72
11	440	178	768	923	240	500	588	6,370	717	383	119	72
12	485	149	1,230	757	230	460	663	3,300	566	387	117	72
13	653	136	982	630	260	450	1,020	2,450	440	466	117	72
14	400	107	632	761	400	420	1,560	2,220	369	387	118	79
15	169	102	449	873	500	440	1,710	2,350	311	278	120	91
16	70	114	866	608	540	500	1,450	2,610	316	234	115	79
17	67	122	1,380	460	430	600	3,190	6,440	529	217	104	69
18	75	155	1,160	464	390	1,100	5,100	5,680	513	206	93	69
19	100	173	598	517	360	1,400	5,590	3,510	422	190	87	66
20	104	223	350	520	330	1,000	4,380	1,730	395	255	83	69
21	87	234	400	549	310	750	2,210	1,610	509	292	80	64
22	80	232	380	370	340	650	4,250	1,350	473	269	61	64
23	79	207	300	383	300	1,600	4,560	966	639	235	59	64
24	68	168	310	401	310	1,740	5,080	789	3,080	441	56	56
25	85	136	973	513	310	1,290	5,500	696	3,270	524	56	43
26	112	132	1,020	700	300	957	4,980	403	3,110	535	56	48
27	145	145	785	1,000	290	834	3,460	423	1,810	682	61	46
28	143	184	609	800	300	467	2,390	414	1,180	373	74	43
29	103	212	702	500	290	520	2,480	369	709	265	82	41
30	108	230	583	440	-----	657	3,310	325	1,140	194	85	41
31	107	-----	405	380	-----	667	-----	313	-----	179	85	-----
TOTAL	4,345	4,590	18,195	16,590	9,390	23,792	70,254	83,598	28,658	17,545	3,155	1,990
MEAN	140	153	587	535	324	767	2,342	2,697	955	566	102	66.3
MAX	653	234	1,880	1,000	540	1,740	5,590	6,370	3,270	2,640	173	91
MIN	54	102	140	289	230	290	476	313	311	179	56	41
MEAN†	118	150	587	532	327	770	2,409	2,659	967	554	98.7	60.2
CFSM†	.38	.49	1.91	1.73	1.08	2.50	7.82	8.63	3.14	1.80	.32	.20
IN.†	.44	.54	2.20	1.99	1.14	2.88	8.73	9.96	3.51	2.07	.37	.22

CAL YR 1971 TOTAL 201,382 MEAN 552 MAX 5,610 MIN 17 MEAN† 552 CFSM† 1.79 IN† 24.33
WTR YR 1972 TOTAL 282,102 MEAN 771 MAX 6,370 MIN 41 MEAN† 770 CFSM† 2.50 IN† 34.06

† Adjusted for change in contents in Ball Mountain and Townshend Reservoirs.

CONNECTICUT RIVER BASIN

0115500 Connecticut River at Vernon, Vt.

LOCATION.--Lat 42°46'10", long 72°30'50", Windham County, on right bank just downstream from Vernon Dam at Vernon, 2 miles upstream from Ashuelot River, and at mile 141.9.

DRAINAGE AREA.--6,266 sq. mi.

PERIOD OF RECORD.--February to April 1936 (in WSP 798), September and October 1938 (in WSP 867), October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level; prior to Jan. 20, 1948, datum was 94.13 ft higher.

AVERAGE DISCHARGE.--28 years (1944-72), 10,170 cfs (22.04 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 78,600 cfs May 5 (gage height, 201.68 ft); minimum daily, 250 cfs Oct. 3, 17.
Period of record: Maximum discharge, 176,000 cfs Mar. 19, 20, 1936 (gage height, 128.8 ft, datum then in use), from rating curve extended above 86,000 cfs; minimum daily, 99 cfs Oct. 8, 1944.
Flood of Mar. 19, 20, 1936, is greatest since at least 1750, from historical data and information by local residents.

REMARKS.--Records good except those below 1,000 cfs, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 207), and other reservoirs (combined usable capacity, about 29 billion cubic feet).

REVISIONS.--WSP 1031: Drainage area.

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,010	4,710	4,450	1,260	5,500	4,700	17,200	43,500	13,000	12,200	8,020	4,950
2	1,810	4,470	3,920	4,060	5,500	5,400	19,700	53,200	15,900	8,230	6,380	4,420
3	250	4,010	3,570	6,290	5,200	9,500	17,800	60,500	15,700	8,790	6,410	2,080
4	3,030	4,830	2,420	8,410	6,000	11,000	18,500	69,300	14,400	10,400	6,730	727
5	3,010	3,860	2,420	7,000	4,800	9,200	17,300	75,900	15,300	10,300	8,030	2,770
6	4,240	1,470	3,790	5,800	1,600	10,000	15,800	73,000	10,300	11,700	4,330	3,770
7	4,600	2,150	4,430	4,500	7,000	7,400	16,400	74,200	12,400	10,400	5,770	1,930
8	4,100	4,760	6,130	4,000	5,400	7,200	14,900	72,400	11,400	5,790	5,190	3,270
9	2,190	4,410	5,750	2,400	4,900	8,000	12,300	70,100	11,000	4,780	5,410	2,110
10	3,380	3,770	4,800	6,400	6,700	8,500	10,700	66,400	12,300	6,910	4,780	1,140
11	7,030	3,530	9,260	6,200	5,400	5,700	12,300	59,400	13,200	9,490	7,810	2,330
12	7,020	3,350	6,490	6,400	4,400	5,200	15,300	47,800	11,000	15,000	4,950	2,500
13	6,110	2,640	11,700	5,700	3,100	5,800	18,400	40,100	11,200	12,700	1,950	2,700
14	5,290	1,690	9,200	6,200	5,600	5,600	22,600	32,400	10,000	11,600	5,180	3,500
15	4,870	3,840	7,660	6,600	6,400	7,300	21,900	25,100	10,300	8,050	5,130	3,500
16	2,160	3,030	7,570	6,400	6,300	6,600	20,700	33,900	10,900	2,640	4,140	2,080
17	250	2,990	12,000	6,200	6,500	9,000	31,800	39,200	10,200	6,790	4,200	1,410
18	3,850	3,620	10,500	6,100	5,800	12,000	43,900	44,000	7,440	8,140	5,030	2,300
19	3,700	4,120	6,670	8,300	5,100	19,000	51,900	37,200	7,890	7,870	2,520	3,800
20	4,010	2,990	7,100	8,100	3,600	18,000	63,000	31,300	10,900	7,870	1,990	2,240
21	3,400	1,720	7,560	7,900	3,900	16,500	56,000	28,200	10,200	6,770	4,410	1,850
22	3,200	5,610	6,990	6,400	4,100	18,000	51,800	26,700	9,060	8,750	4,730	2,650
23	2,870	4,920	6,160	4,300	4,300	24,500	49,800	18,500	4,770	12,600	2,820	1,410
24	2,980	4,450	4,990	5,600	4,000	25,000	50,800	14,400	11,100	12,500	3,860	1,510
25	2,680	1,740	5,910	7,600	4,400	23,000	52,700	12,500	11,100	18,000	5,230	2,710
26	5,640	2,210	6,710	8,000	4,100	20,100	50,200	12,700	13,600	14,000	3,330	2,090
27	5,010	1,920	7,350	7,700	2,700	18,000	44,000	10,700	15,900	12,400	1,680	2,660
28	5,540	1,430	8,420	7,400	4,800	15,900	36,700	7,340	12,100	10,500	6,700	2,910
29	5,970	4,340	9,580	6,400	4,600	15,300	34,300	5,410	8,070	10,500	8,540	1,520
30	1,090	5,930	9,800	2,800	-----	16,700	37,600	7,760	10,900	7,980	5,750	2,610
31	307	-----	7,620	6,700	-----	15,800	-----	9,280	-----	7,150	3,800	-----
TOTAL	112,687	104,550	212,920	187,120	141,700	385,000	926,000	1,202,440	341,460	300,800	154,800	75,447
MEAN	3,635	3,485	6,868	6,036	4,586	12,420	30,870	38,790	11,380	9,703	4,994	2,515
MAX	7,030	5,930	12,000	8,410	7,000	25,000	63,000	75,900	15,900	18,000	8,540	4,950
MIN	250	1,430	2,420	1,260	1,600	4,700	10,700	5,410	4,700	2,640	1,680	727
MEAN†	3,190	3,138	6,360	5,619	4,107	11,380	31,200	42,540	11,430	9,832	4,452	1,943
CFSM†	.51	.50	1.02	.90	.66	1.82	4.98	6.79	1.82	1.57	.71	.31
IN.†	.59	.56	1.17	1.03	.71	2.09	5.56	7.83	2.04	1.81	.82	.35
CAL YR 1971	TOTAL	3,251,150	MEAN	8,907	MAX	63,900	MIN	230	MEAN†	8,884	CFSM†	1.42
WTR YR 1972	TOTAL	4,144,874	MEAN	11,320	MAX	75,900	MIN	250	MEAN†	11,300	CFSM†	1.80
											IN†	19.25
												24.55

PEAK DISCHARGE (BASE, 50,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1500	198.85	65,800				
5-5	1715	201.68	78,600				

† Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to reservoirs in West River Basin listed on page 207.

M Expressed in thousands.

CONNECTICUT RIVER BASIN

159

01157000 Ashuelot River near Gilsum, N.H.

LOCATION.--Lat 43°02'21", long 72°16'14", Cheshire County, on right bank 50 ft downstream from White Brook, 60 ft upstream from stone-arch bridge just off Keene-Newport road, 0.7 mile downstream from Gilsum, and at mile 43.4.

DRAINAGE AREA.--71.1 sq mi.

PERIOD OF RECORD.--August 1922 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1942. Datum of gage is 772.86 ft above mean sea level (levels by Corps of Engineers); prior to Oct. 1, 1964, datum was 1.00 ft higher.

AVERAGE DISCHARGE.--50 years, 123 cfs (23.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,410 cfs Apr. 20 (gage height, 7.28 ft); minimum, 2.5 cfs Sept. 11, 12.

Period of record: Maximum discharge, 5,220 cfs Sept. 21, 1938 (gage height, 12.24 ft in gage well, present datum), from rating curve extended above 2,000 cfs on basis of float measurements at gage heights 11.66 and 11.72 ft and slope-area measurement at gage height 12.24 ft (all at present datum); maximum gage height, 13.80 ft, present datum, Mar. 19, 1936; minimum discharge, about 1 cfs Oct. 6, 1922, July 10, 1923, Nov. 14, 1932. Maximum discharge since at least 1859, that of Sept. 21, 1938.

REMARKS.--Records good except those for winter period, which are fair. Some regulation by reservoir above station. Prior to 1938, diurnal fluctuation caused by powerplant above station.

REVISIONS (WATER YEARS).--WSP 661: Drainage area. WSP 781: 1934(M). WSP 1231: 1923-27(M), 1928, 1929-30(M), 1931, 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	15	65	84	65	80	197	688	630	138	17	5.7
2	8.2	18	57	101	62	136	263	808	577	130	16	4.9
3	7.6	22	59	113	60	160	268	836	361	136	19	4.9
4	7.5	22	45	100	80	180	237	1,140	244	246	18	4.7
5	7.0	26	42	88	95	150	210	1,030	189	208	15	4.3
6	7.7	21	45	74	80	130	190	808	147	162	13	3.9
7	8.9	26	60	72	72	110	187	598	129	117	11	3.6
8	8.1	13	88	78	65	105	167	514	112	86	14	3.6
9	7.7	33	92	100	60	100	152	712	156	67	13	3.6
10	22	30	90	150	55	94	150	716	143	56	11	2.9
11	51	30	145	160	50	84	167	528	110	52	9.7	2.6
12	44	30	180	139	46	77	192	402	86	52	9.1	2.9
13	45	29	165	127	45	73	306	306	73	47	8.1	3.7
14	45	27	135	381	120	70	429	244	64	44	9.1	6.5
15	41	26	115	330	150	70	367	364	57	40	8.3	8.1
16	36	24	120	210	130	75	408	479	53	37	7.0	7.2
17	30	23	165	140	105	135	836	423	54	49	6.7	7.8
18	24	22	163	120	95	400	1,110	342	51	44	6.5	4.4
19	22	22	117	105	92	500	1,170	270	47	38	9.1	5.2
20	19	23	112	100	100	420	1,370	221	45	36	5.8	8.1
21	17	23	102	97	85	353	1,120	218	43	33	4.9	7.4
22	16	28	84	91	80	339	860	192	43	31	4.3	7.0
23	15	29	73	90	76	556	816	154	75	50	3.8	5.7
24	14	24	83	81	78	497	920	130	187	47	3.5	5.8
25	15	35	167	102	74	399	924	104	282	40	3.2	5.5
26	17	61	180	160	72	321	796	42	355	43	3.0	5.8
27	17	54	139	120	72	261	644	70	306	41	7.0	6.1
28	17	49	120	100	70	220	521	62	229	34	30	6.3
29	19	44	113	85	68	201	504	55	164	28	15	5.5
30	18	65	99	75	-----	214	570	47	129	23	9.4	6.3
31	17	-----	92	70	-----	192	-----	95	-----	20	7.0	-----
TOTAL	632.3	915	3,303	3,843	2,302	6,696	16,051	12,642	5,141	2,175	317.5	160.0
MEAN	20.4	30.5	107	124	79.4	218	535	408	171	70.2	10.2	5.33
MAX	51	65	180	391	150	556	1,370	1,140	630	246	30	8.1
MIN	7.0	15	42	70	45	70	150	47	43	20	3.0	2.6
CFSM	.29	.43	1.50	1.74	1.12	3.04	7.52	5.74	2.41	.99	.14	.08
IN.	.33	.48	1.73	2.01	1.20	3.50	8.40	6.61	2.69	1.14	.17	.08

CAL YR 1971 TOTAL 38,307.2 MEAN 105 MAX 924 MIN 3.5 CFSM 1.48 IN 20.04
WTR YR 1972 TOTAL 54,177.6 MEAN 148 MAX 1,370 MIN 2.6 CFSM 2.08 IN 28.35

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1200	7.28	1,410				
5-4	1215	6.81	1,200				

CONNECTICUT RIVER BASIN

01158000 Ashuelot River below Surry Mountain Dam, near Keene, N.H.

LOCATION.--Lat 42°59'40", long 72°18'40", Cheshire County, on right bank 600 ft downstream from Surry Mountain Dam, 2.5 miles upstream from Sturtevant Brook, 4.5 miles north of Keene, and at mile 34.0.

DRAINAGE AREA.--101 sq mi.

PERIOD OF RECORD.--September 1945 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 480.00 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--27 years, 166 cfs (22.32 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,150 cfs Apr. 19 (gage height, 9.20 ft); minimum daily, 5.0 cfs Sept. 12.

Period of record: Maximum discharge, 1,320 cfs Oct. 28, 1959 (gage height, 9.60 ft); minimum daily, 0.4 cfs Sept. 17, 1964.

REMARKS.--Records excellent. Flow regulated by Surry Mountain Lake (see p. 207).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	22	75	111	114	100	244	975	488	191	38	18
2	8.6	24	63	99	99	100	325	975	681	181	33	15
3	9.3	30	42	111	91	139	362	965	665	168	33	13
4	9.0	31	34	142	92	173	355	946	497	252	31	11
5	9.3	30	34	142	93	175	328	851	362	279	26	10
6	9.2	30	34	141	93	175	300	886	281	245	23	9.4
7	10	32	34	112	107	174	286	873	235	199	21	8.2
8	9.9	39	34	96	115	172	266	883	204	157	23	7.8
9	9.0	41	44	81	115	170	245	868	220	122	22	7.7
10	19	41	91	72	114	144	234	861	227	100	20	5.7
11	58	41	149	102	113	118	243	882	203	86	17	5.2
12	66	40	211	163	99	110	260	878	173	79	16	5.0
13	61	39	219	187	90	110	324	814	144	73	16	5.5
14	59	37	237	221	90	110	498	615	123	72	16	10
15	56	34	202	284	128	110	547	481	109	62	16	14
16	52	34	172	306	195	215	540	546	98	56	15	14
17	46	32	172	300	234	233	771	549	94	70	14	14
18	39	31	172	294	233	416	821	531	87	72	14	14
19	34	30	159	288	229	616	1,030	456	81	65	13	20
20	29	30	155	278	188	664	800	389	76	62	12	25
21	27	31	142	230	133	576	772	354	70	55	11	22
22	25	36	142	160	123	489	1,020	322	65	90	10	20
23	23	37	113	108	123	714	1,020	230	69	62	9.7	17
24	21	31	98	109	109	794	1,020	199	122	78	8.8	15
25	23	37	119	110	102	670	1,000	187	216	73	7.8	14
26	25	37	177	112	102	525	973	166	320	65	7.6	14
27	25	45	190	114	102	419	1,030	143	348	65	7.9	15
28	24	51	189	114	101	344	1,040	125	306	65	39	13
29	24	54	189	115	100	308	1,000	110	248	60	42	12
30	24	64	198	115	-----	306	970	96	199	52	30	14
31	23	-----	151	114	-----	293	-----	122	-----	44	23	-----
TOTAL	865.6	1,091	4,051	4,911	3,627	9,652	18,664	17,278	7,011	3,260	615.8	388.5
MEAN	27.9	36.4	131	159	125	311	622	557	234	105	19.9	13.0
MAX	66	64	239	306	234	784	1,040	975	681	279	42	25
MIN	8.3	22	34	72	90	100	234	96	65	44	7.6	5.0
MEAN†	28.4	38.2	137	161	123	309	691	488	238	99.7	19.0	12.5
CFSM†	.28	.38	1.36	1.59	1.22	3.06	6.84	4.83	2.36	.99	.19	.12
IN.†	.32	.42	1.57	1.84	1.30	3.53	7.64	5.57	2.63	1.14	.22	.14

CAL YR 1971 TOTAL 48,169.8 MEAN 132 MAX 1,040 MIN 4.1 MEAN† 132 CFSM† 1.31 IN† 17.78
 WTR YR 1972 TOTAL 71,434.9 MEAN 195 MAX 1,040 MIN 5.0 MEAN† 195 CFSM† 1.93 IN† 26.31

† Adjusted for change in contents in Surry Mountain Lake.

CONNECTICUT RIVER BASIN

161

01158600 Otter Brook below Otter Brook Dam, near Keene, N.H.

LOCATION.--Lat 42°56'45", long 72°14'14", Cheshire County, on right bank 450 ft downstream from Otter Brook Dam, 2 miles northeast of Keene, 2.4 miles upstream from Minnewawa Brook, and 4.9 miles upstream from mouth.

DRAINAGE AREA.--47.2 sq mi.

PERIOD OF RECORD.--May 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--14 years, 71.6 cfs (20.60 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 664 cfs Apr. 26 (gage height, 8.61 ft); minimum, 2.0 cfs Sept. 11; minimum daily, 2.1 cfs Sept. 12.
Period of record: Maximum discharge, 685 cfs Apr. 20, 1959 (gage height, 8.99 ft); maximum gage height, 8.61 ft Apr. 26, 1972; minimum discharge, 0.1 cfs Nov. 28, 1959; minimum daily, 0.3 cfs Sept. 27 to Oct. 2, Oct. 9, 10, 12-20, 1964.

REMARKS.--Records good. Flow regulated by Otter Brook Lake (see p. 207).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	7.7	3.9	7.4	4.3	4.0	11.9	56.9	33.8	7.6	11	9.7
2	3.7	9.1	3.1	6.0	4.4	5.8	15.5	38.4	45.7	6.7	9.3	8.7
3	3.8	1.1	2.4	6.5	3.8	7.6	15.7	37.1	26.3	6.1	12	7.6
4	4.0	1.5	2.1	7.0	4.8	9.5	14.1	33.1	12.7	13.6	14	6.3
5	4.3	1.3	2.1	7.0	6.2	10.3	12.6	50.4	13.0	9.6	12	5.0
6	4.1	1.1	2.1	6.9	6.6	10.3	11.8	52.5	10.3	7.8	10	4.0
7	4.1	1.4	2.1	5.9	5.9	8.5	11.5	40.0	9.6	6.3	9.1	3.4
8	3.7	2.1	2.1	5.5	4.6	7.5	10.4	29.4	8.9	5.2	10	3.1
9	3.3	2.0	2.1	4.6	4.2	7.5	9.7	27.9	12.8	4.3	9.7	3.1
10	9.7	1.8	2.6	5.6	4.2	6.8	9.7	31.6	11.4	3.5	9.4	2.7
11	3.7	1.8	3.8	7.6	3.7	6.4	10.5	35.0	9.3	3.2	7.8	2.2
12	2.7	1.6	6.0	8.6	3.4	6.0	11.4	24.9	7.9	2.8	6.7	2.1
13	2.4	1.5	6.9	8.3	3.3	5.8	17.4	16.9	7.0	2.5	6.6	2.9
14	1.9	1.4	7.0	8.9	3.3	5.4	29.0	14.1	6.3	2.9	6.9	6.9
15	1.5	1.4	7.0	12.2	5.8	5.2	24.7	24.4	5.6	2.6	7.8	9.5
16	1.2	1.4	7.0	13.9	8.9	3.9	24.7	30.8	5.0	2.5	7.1	8.3
17	1.2	1.3	7.0	11.1	9.8	10.1	34.2	24.9	4.8	4.7	6.4	6.6
18	1.2	1.3	7.2	9.5	9.8	31.0	32.1	22.5	4.4	1.4	6.2	5.8
19	1.4	1.4	7.2	9.5	7.8	33.7	30.7	1.83	4.1	2.7	6.6	5.9
20	1.3	1.5	6.3	9.5	6.9	25.7	12.5	1.56	4.1	2.6	5.8	9.6
21	1.0	1.5	5.8	9.5	6.9	17.4	22.7	1.70	4.0	2.4	4.7	9.4
22	9.1	2.5	5.8	7.2	6.9	17.0	41.1	14.7	3.8	2.1	4.0	8.2
23	9.0	2.6	5.7	6.9	6.1	36.4	41.3	12.5	5.6	3.8	3.5	6.7
24	7.2	2.2	5.7	6.9	5.2	33.2	41.8	10.7	7.9	3.8	3.0	5.6
25	9.3	2.3	5.7	6.9	4.9	21.5	47.8	8.9	8.5	2.8	2.8	5.6
26	1.0	2.6	6.7	7.6	9.0	17.6	59.8	7.6	11.3	7.3	2.6	5.8
27	1.0	2.7	7.3	9.0	5.0	14.5	62.1	6.9	9.4	2.0	3.3	5.4
28	9.8	2.6	7.3	7.1	4.9	12.6	60.0	6.2	7.7	1.8	3.5	4.4
29	9.4	2.6	8.0	6.0	4.2	11.9	57.9	5.5	6.5	1.5	2.8	4.0
30	8.9	4.0	8.5	5.6	-----	12.9	55.9	4.7	5.9	1.3	1.8	4.2
31	8.2	-----	8.2	4.8	-----	11.6	-----	10.6	-----	1.1	1.3	-----
TOTAL	328.4	543.8	1,647	2,369	1,606	4,176	8,395	7,858	3,136	1,245	292.3	172.6
MEAN	10.6	18.1	53.1	76.4	55.4	135	280	253	105	40.5	9.43	5.75
MAX	37	40	85	139	94	364	621	584	457	136	35	9.7
MIN	3.3	7.7	2.1	4.6	3.3	3.9	6.7	4.7	3.8	1.1	2.6	2.1
MEAN†	10.7	18.6	57.7	73.1	55.1	134	322	212	105	40.0	9.43	5.48
CFSM†	.23	.39	1.22	1.55	1.17	2.84	6.82	4.49	2.22	.85	.20	.12
IN†	.26	.44	1.41	1.79	1.26	3.28	7.61	5.19	2.48	.98	.23	.13
CAL YR 1971	TOTAL 22,209.9	MEAN 60.8	MAX 91.3	MIN 2.0	MEAN† 61.2	CFSM† 1.30	IN† 17.60					
WTR YR 1972	TOTAL 31,779.1	MEAN 85.8	MAX 621	MIN 2.1	MEAN† 86.8	CFSM† 1.84	IN† 25.05					

† Adjusted for change in contents in Otter Brook Lake.

CONNECTICUT RIVER BASIN

01160000 South Branch Ashuelot River at Webb, near Marlborough, N.H.

LOCATION.--Lat 42°52'20", long 72°12'51", Cheshire County, on right bank 15 ft downstream from bridge, at Webb, 2.5 miles south of Marlborough, and at mile 10.9.

DRAINAGE AREA.--36.0 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only October 1920, published in WSP 1301.

GAGE.--Water-stage recorder. Concrete control since July 18, 1938. Datum of gage is 667.11 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--32 years, 58.1 cfs (21.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 681 cfs Apr. 20 (gage height, 5.36 ft); maximum gage height, 5.46 ft Jan. 27 (backwater from ice); minimum discharge, 3.2 cfs Sept. 13; minimum daily, 3.9 cfs Sept. 12.
 Period of record: Maximum discharge, 5,960 cfs Sept. 21, 1938 (gage height, 7.89 ft), from rating curve extended above 3,300 cfs on basis of contracted-opening and slope-area measurements of peak flow; maximum gage height, 9.70 ft Mar. 12, 1936 (ice jam); practically no flow Mar. 22, 1931; minimum daily discharge, 0.4 cfs Sept. 15-17, 1926.

REMARKS.--Records good except those for winter period, which are fair. Regulation at times prior to 1962 by powerplant and several small reservoirs above station; regulation greater prior to 1956. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 641: 1925(M). WSP 871: Drainage area. WSP 1231: 1921-24(M), 1926(M), 1929, 1933-34(M), 1939. WRD Mass., N.H., R.I., Vt., 1971: 1966(M), 1967-69.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	8.8	72	51	34	44	112	135	350	56	13	11
2	5.7	10	49	57	33	74	146	148	259	45	12	9.9
3	5.3	19	37	86	32	131	139	183	129	50	11	9.0
4	4.9	19	30	67	52	135	120	322	92	98	13	12
5	4.6	16	23	58	52	84	107	264	222	62	12	8.1
6	4.8	14	22	52	42	68	101	168	156	49	11	7.2
7	4.3	17	44	47	37	60	100	126	123	38	10	6.4
8	4.0	30	59	45	32	65	88	141	100	32	34	5.8
9	4.0	25	47	50	29	62	82	302	141	29	30	5.4
10	11	20	49	94	25	55	83	238	128	25	29	4.8
11	73	18	95	100	21	50	87	153	100	21	22	4.1
12	47	17	113	87	20	46	94	120	83	18	17	3.9
13	20	16	81	74	21	47	171	100	72	17	14	4.2
14	22	15	63	222	55	41	279	87	61	26	14	7.1
15	19	15	56	150	70	46	216	253	59	24	14	8.6
16	15	17	107	90	55	45	229	288	53	22	11	8.6
17	12	17	132	75	48	130	534	206	51	235	11	7.3
18	10	16	40	60	43	472	512	174	46	106	10	6.4
19	8.9	17	64	54	40	313	491	127	40	59	10	6.7
20	8.4	18	56	51	52	210	618	112	39	70	9.5	7.0
21	8.3	17	53	51	41	139	445	123	34	51	8.8	6.9
22	8.4	21	45	47	39	212	329	100	37	35	8.2	6.5
23	9.1	20	38	44	37	526	473	84	63	39	7.6	6.1
24	7.8	17	52	44	41	340	427	72	65	42	7.3	5.8
25	9.6	18	115	56	39	222	341	62	63	34	6.8	5.5
26	14	20	92	80	38	150	270	55	76	27	6.5	5.3
27	13	20	74	65	36	120	206	50	50	22	8.0	5.0
28	12	21	71	54	37	105	158	45	44	21	21	4.7
29	11	24	69	45	36	105	143	44	37	22	25	4.7
30	9.8	92	59	40	-----	114	137	36	36	16	20	4.7
31	9.1	-----	53	37	-----	100	-----	62	-----	16	14	-----
TOTAL	409.9	614.8	2,012	2,138	1,139	4,311	7,238	4,360	2,817	1,407	440.7	198.7
MEAN	13.2	20.5	64.9	69.0	39.3	139	241	141	93.9	45.4	14.2	6.62
MAX	73	92	132	222	70	526	618	322	350	235	34	12
MIN	4.0	8.8	22	37	20	41	42	36	34	16	6.5	3.9
CFSM	.37	.57	1.80	1.92	1.09	3.86	6.69	3.92	2.61	1.26	.39	.18
IN.	.42	.64	2.08	2.21	1.18	4.45	7.48	4.51	2.91	1.45	.46	.21
CAL YR 1971	TOTAL 18,866.2	MEAN 51.7	MAX 479	MIN 3.7	CFSM 1.44	IN 19.50						
WTR YR 1972	TOTAL 27,086.1	MEAN 74.0	MAX 618	MIN 3.9	CFSM 2.06	IN 27.99						

PEAK DISCHARGE (BASE, 550 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	0345	5.19	585				
4-17	2030	5.31	651				
4-20	1615	5.36	681				

CONNECTICUT RIVER BASIN

163

01161000 Ashuelot River at Hinsdale, N.H.

LOCATION.--Lat 42°47'07", long 72°29'12", Cheshire County, on left bank 40 ft upstream from highway bridge at Hinsdale, 0.2 mile downstream from dam, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--420 sq mi.

PERIOD OF RECORD.--March 1907 to December 1911, July 1914 to current year.

GAGE.--Water-stage recorder. Datum of gage is 101.32 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 29, 1933, nonrecording gage on highway bridge at same datum.

AVERAGE DISCHARGE.--62 years, 650 cfs (21.02 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 5,250 cfs Apr. 21 (gage height, 7.58 ft); minimum, 71 cfs Oct. 10; minimum daily, 74 cfs Oct. 1-5. Period of record: Maximum discharge, 16,600 cfs Mar. 19, 1936, by computation of peak flow over dam; maximum gage height, 20.2 ft Mar. 19, 1936, from floodmarks (backwater from Connecticut River); minimum discharge, 10 cfs Sept. 9, 1953; minimum daily, 12 cfs Sept. 15, 1929. Maximum discharge since at least 1859, that of Mar. 19, 1936.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow regulated by Surry Mountain Lake 33 miles upstream since 1942 and by Otter Brook Lake 29 miles upstream since 1958 (see p. 207). Occasional diurnal fluctuation at low flow by mills above station; greater regulation prior to 1952.

REVISIONS (WATER YEARS).--WSP 661: Drainage area. WSP 781: 1907-10, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1701: 1920.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEARS OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	149	500	540	410	419	1,410	2,410	2,420	1,110	200	184
2	74	153	450	410	390	594	1,440	2,410	2,470	940	187	172
3	74	213	390	640	400	740	1,740	2,470	2,500	913	184	157
4	74	215	290	710	553	920	1,540	3,190	1,840	1,740	191	152
5	74	201	270	577	553	880	1,570	3,480	1,910	1,490	177	149
6	74	143	280	600	600	730	1,470	3,100	1,780	1,180	181	144
7	74	193	390	570	540	690	1,420	2,420	1,500	939	194	135
8	74	230	490	550	490	740	1,310	2,430	1,300	760	190	125
9	74	230	430	510	410	710	1,220	2,430	1,340	640	210	106
10	113	220	490	510	470	670	1,190	2,490	1,410	530	271	90
11	344	202	700	710	390	627	1,270	2,470	1,250	447	200	82
12	344	193	990	740	370	581	1,290	2,420	1,650	373	173	80
13	290	197	1,000	790	350	590	1,600	2,150	901	330	156	81
14	224	171	800	1,050	527	529	2,440	1,910	901	357	140	95
15	228	184	700	1,240	659	507	2,470	1,960	712	340	157	119
16	220	181	600	1,140	702	550	2,440	2,450	654	330	153	120
17	207	181	1,020	944	782	620	3,470	2,510	621	1,190	144	112
18	195	180	987	987	787	610	2,140	2,370	590	1,130	139	105
19	195	185	775	918	697	610	2,440	2,100	487	787	134	107
20	180	170	718	871	570	2,710	2,670	1,770	590	545	127	123
21	170	170	655	813	620	2,300	2,450	1,710	430	940	120	130
22	140	150	603	724	540	2,140	3,430	1,600	303	433	111	126
23	150	200	493	610	490	2,400	2,470	1,340	460	401	104	135
24	140	180	540	577	490	3,000	2,040	1,170	577	553	100	125
25	200	190	793	812	490	2,140	3,420	1,040	287	474	96	116
26	200	210	840	770	400	2,380	3,560	444	1,160	376	90	109
27	200	240	746	770	360	1,450	2,220	791	1,190	313	101	104
28	190	290	780	600	343	1,560	3,120	715	590	293	245	99
29	170	240	791	600	347	1,470	2,940	644	914	240	476	92
30	165	530	710	540	-----	1,430	2,720	573	293	237	289	92
31	150	-----	600	490	-----	1,450	-----	670	-----	215	229	-----
TOTAL	5,109	6,121	14,856	20,657	14,870	44,019	70,360	22,050	33,437	20,220	5,480	3,566
MEAN	165	200	480	667	480	1,420	2,274	711	1,111	652	176	119
MIN	74	149	260	400	390	419	1,090	2,410	1,110	210	94	40
MEAN†	160	206	653	730	508	1,418	2,750	1,891	1,135	646	175	118
CFSMT	.40	.49	1.55	1.74	1.21	3.38	6.57	4.50	2.70	1.54	.42	.28
INT	.46	.55	1.79	2.00	1.31	3.89	7.33	5.19	3.02	1.77	.48	.31
COL YR 1971	TOTAL 231,535	MEAN 640	MEAN 3,700	MEAN 60	MEAN 553	CFSMT 1.32	INT 17.88					
YR 1972	TOTAL 317,323	MEAN 667	MEAN 4,470	MEAN 74	MEAN 867	CFSMT 2.06	INT 20.11					

† Adjusted for change in contents in Surry Mountain and Otter Brook Lakes.
NOTE.--No gage-height record Oct. 1-7, Nov. 18 to Dec. 11.

CONNECTICUT RIVER BASIN

01161500 Tarbell Brook near Winchendon, Mass.

LOCATION.--Lat 42°42'45", long 72°05'09", Worcester County, on left bank 0.1 mile downstream from Spud Brook, 0.3 mile downstream from Massachusetts-New Hampshire State line, and 2.8 miles northwest of Winchendon.

DRAINAGE AREA.--145.3 sq mi.

PERIOD OF RECORD.--May 1916 to current year. Prior to October 1950, published as Slip Pond Brook near Winchendon.

GAGE.--Water-stage recorder. Concrete control since Sept. 24, 1965. Datum of gage is 872.82 ft above mean sea level. May 29 to June 29, 1916, nonrecording gage; June 30 to Dec. 12, 1916, water-stage recorder; and Dec. 13, 1916, to June 26, 1917, nonrecording gage, all at site 450 ft downstream at same datum.

AVERAGE DISCHARGE.--56 years, 28.9 cfs (21.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 277 cfs Apr. 21 (gage height, 9.28 ft); minimum, 2.1 cfs Sept. 27. Period of record: Maximum discharge, 2,630 cfs Sept. 21, 1938 (gage height, 13.72 ft), from rating curve extended above 1,200 cfs on basis of critical-depth study at control section; minimum, 0.1 cfs Aug. 25, 1924.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Some regulation by Peewy and Slip Ponds and Damon Reservoirs 1 mile upstream. Prior to 1967, greater regulation by these reservoirs and by small mill above station.

REVISIONS (WATER YEARS).--WSP 781: 1934. WSP 871: Drainage area. WSP 1051: 1928(M), 1933-34. WSP 1301: 1917(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.7	29	29	20	19	61	75	75	31	7.0	5.0
2	3.0	5.6	24	29	18	23	70	78	104	32	6.8	4.5
3	2.8	6.8	20	36	18	36	72	60	78	29	6.0	6.2
4	2.8	12	17	36	24	45	68	110	56	34	5.6	5.0
5	4.9	9.7	16	35	24	42	65	120	58	33	7.0	5.5
6	5.7	9.5	15	31	21	37	42	105	57	31	5.5	3.6
7	3.5	11	20	28	20	34	64	95	52	26	5.0	3.7
8	3.0	13	23	25	19	37	57	85	47	22	6.0	3.9
9	2.6	9.4	21	24	18	37	50	90	53	19	5.5	3.7
10	5.7	9.9	21	40	17	39	50	100	70	17	6.5	3.9
11	14	10	29	46	16	33	50	92	63	16	5.0	3.4
12	12	9.2	34	42	16	28	50	80	48	14	4.5	3.4
13	10	9.4	32	39	17	26	65	68	40	13	4.2	5.2
14	8.8	9.1	30	53	26	26	107	56	34	10	4.0	4.7
15	7.8	8.3	27	60	31	30	111	66	30	10	6.0	4.9
16	7.5	8.4	32	49	30	29	106	89	27	8.9	5.2	3.7
17	6.2	7.7	38	38	26	58	154	95	25	15	4.7	3.4
18	4.7	7.7	37	33	24	112	215	86	21	14	4.3	3.2
19	2.6	8.2	30	30	25	117	211	75	19	11	5.0	5.7
20	2.6	12	26	29	31	99	235	66	19	20	6.0	4.7
21	5.2	16	24	28	25	86	257	64	18	15	4.5	3.5
22	4.9	19	22	25	22	89	200	59	19	11	4.0	3.2
23	3.1	18	20	24	21	143	199	51	18	14	3.5	3.0
24	2.8	17	24	24	20	147	213	64	25	16	3.3	2.8
25	3.3	16	43	30	19	128	182	37	29	13	5.2	2.6
26	3.4	18	41	40	20	109	159	30	36	11	6.4	3.0
27	3.7	15	36	36	20	93	140	20	34	10	7.5	2.3
28	4.2	14	34	30	19	79	110	21	30	9.0	13	2.5
29	4.7	12	33	27	18	71	95	19	26	8.3	6.6	2.6
30	5.0	26	11	24	-----	70	82	17	26	7.6	5.7	3.0
31	3.6	-----	32	22	-----	65	-----	20	-----	7.2	5.0	-----
TOTAL	157.3	352.6	861	1,044	625	1,987	3,560	2,103	1,237	528.0	174.5	114.2
MEAN	5.07	11.8	27.8	33.7	21.6	64.1	119	67.8	41.2	17.0	5.63	3.61
MAX	14	26	43	60	31	147	257	120	104	34	13	5.7
MIN	2.6	4.7	15	22	16	19	50	17	18	7.2	3.3	2.3
CFSM	2.28	6.5	1.53	1.95	1.19	3.52	6.54	3.73	2.26	0.93	0.31	0.21
IN.	0.32	0.72	1.76	2.13	1.28	4.06	7.28	4.30	2.53	1.08	0.36	0.23

CAL YR 1971 TOTAL 8,743.3 MEAN 24.0 MAX 179 MIN 1.4 CFSM 1.32 IN 17.87
WTR YR 1972 TOTAL 12,743.6 MEAN 34.8 MAX 257 MIN 2.3 CFSM 1.91 IN 26.05

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-24	0130	8.21	154				
4-21	0300	9.28	277				

NOTE.--No gage-height record July 18 to Aug. 25.

CONNECTICUT RIVER BASIN

165

01162000 Millers River near Winchendon, Mass.

LOCATION.--Lat 42°41'03", long 72°05'02", Worcester County, on right bank 10 ft downstream from Nolan Bridge, 0.3 mile downstream from Tarbell Brook, 2 miles west of Winchendon, and at mile 32.8.

DRAINAGE AREA.--83.0 sq mi.

PERIOD OF RECORD.--June 1916 to current year. March to May 1917, monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Concrete control since Oct. 6, 1933. Datum of gage is 826.66 ft above mean sea level. Prior to July 27, 1916, nonrecording gage at bridge at same datum.

AVERAGE DISCHARGE.--56 years, 140 cfs (22.91 inches per year).

EXTREMES.--Maximum discharge, 1,220 cfs Apr. 20 (gage height, 8.49 ft); minimum daily, 21 cfs Sept. 11, 12.

Period of record: Maximum discharge, 8,500 cfs Sept. 22, 1938 (gage height, 21.35 ft, from floodmarks), from rating curve extended above 2,000 cfs on basis of computation of peak flow over dam; practically no flow because of regulation Sept. 20, 1918, Jan. 14, 1925.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Flow regulated by Lake Monomonee 6 miles upstream and other reservoirs and, prior to 1937, by powerplant.

REVISIONS (WATER YEARS).--WSP 451: 1916. WSP 871: Drainage area. WSP 1061: 1919, 1920-21(M), 1922-24, 1928(M), 1933-34.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	36	141	160	113	117	316	414	400	150	30	33
2	48	68	120	156	108	139	354	416	500	140	33	29
3	46	97	106	106	108	210	352	441	410	130	30	29
4	44	89	93	172	137	247	337	614	370	170	30	32
5	52	67	87	168	129	238	322	641	360	150	24	31
6	94	58	85	160	120	210	308	564	350	130	22	28
7	41	63	122	145	110	200	312	483	300	117	26	26
8	32	68	129	130	105	208	284	443	270	104	26	25
9	29	58	120	146	100	210	257	499	300	93	32	24
10	56	51	122	234	98	190	251	497	400	76	33	23
11	106	51	175	223	96	175	255	449	380	63	27	21
12	80	51	188	210	95	153	257	400	310	52	26	21
13	63	70	163	199	110	144	325	354	260	56	24	25
14	56	68	144	310	210	139	466	314	220	61	27	33
15	52	67	141	282	197	153	460	398	190	56	29	43
16	48	67	150	215	186	158	451	485	170	51	28	54
17	43	63	221	175	158	292	697	436	150	68	28	87
18	41	63	199	160	144	517	862	405	140	52	31	102
19	44	63	163	151	120	510	939	369	135	58	30	113
20	52	67	151	144	160	447	1,070	349	130	76	30	111
21	46	72	141	144	155	392	1,120	366	125	68	26	102
22	46	80	132	134	150	430	1,010	340	125	59	26	97
23	43	74	125	132	145	680	1,010	298	140	61	29	91
24	40	68	153	132	135	639	1,020	262	170	63	27	89
25	51	132	228	172	125	547	911	226	180	54	27	85
26	49	78	159	190	120	466	784	201	190	44	24	83
27	44	70	184	170	115	408	666	175	180	40	30	89
28	43	70	177	144	115	363	567	150	170	36	100	95
29	44	72	172	135	111	346	494	130	150	32	65	85
30	43	141	161	120	-----	350	449	120	135	31	48	91
31	38	-----	163	117	-----	318	-----	150	-----	29	38	-----
TOTAL	1,526	2,142	4,695	5,316	3,775	9,596	16,906	11,389	7,310	2,370	1,066	1,801
MEAN	49.2	71.4	151	171	130	310	564	367	244	76.5	32.5	60.0
MAX	106	141	228	310	210	680	1,120	441	500	170	100	113
MIN	29	36	85	117	95	117	251	120	125	29	22	21
CFSM	.59	.86	1.82	2.06	1.57	3.73	6.80	4.42	2.94	.92	.39	.72
IN.	.68	.96	2.10	2.38	1.69	4.30	7.58	5.10	3.28	1.06	.45	.81

CAL YR 1971 TOTAL 44,837 MEAN 123 MAX 743 MIN 16 CFSM 1.48 IN 20.10
WTR YR 1972 TOTAL 67,832 MEAN 185 MAX 1,120 MIN 21 CFSM 2.23 IN 30.40

PEAK DISCHARGE (BASE, 690 CFS)

NOTE.--No gage-height record May 28 to July 6.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	1630	7.02	706				
4-20	2315	8.49	1,220				

CONNECTICUT RIVER BASIN

01162500 Priest Brook near Winchendon, Mass.

LOCATION.--Lat 42°40'57", long 72°06'56", Worcester County, on right bank 100 ft downstream from highway bridge, 3 miles upstream from mouth, and 3.5 miles west of Winchendon.

DRAINAGE AREA.--19.4 sq mi.

PERIOD OF RECORD.--May 1916 to current year. Monthly discharge only October 1917 to July 1918 (published in WSP 1301) and September 1935 to September 1936.

GAGE.--Water-stage recorder. Concrete control since September 1936. Datum of gage is 849.67 ft above mean sea level. Prior to Sept. 11, 1936, nonrecording gage on left bank at same datum.

AVERAGE DISCHARGE.--56 years, 32.1 cfs (22.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 361 cfs Apr. 20 (gage height, 4.96 ft); minimum, 1.3 cfs Sept. 24.

Period of record: Maximum discharge, 3,000 cfs Sept. 21, 1933 (gage height, 9.90 ft), from rating curve extended above 620 cfs on basis of contracted-opening measurements at gage heights 8.4 and 9.90 ft; minimum, 0.08 cfs several times in September 1929.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Prior to 1962, occasional diurnal fluctuation at low flow by mill above station; prior to 1953, regulation at low flow by mill and ponds.

REVISIONS (WATER YEARS).--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1922-24. WSP 1301: 1917(M), 1919-24(M), 1926-27(M), 1929(M), 1931-35(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	6.1	26	30	19	19	67	71	83	18	4.4	3.6
2	2.1	7.8	23	29	18	26	76	60	114	16	4.2	2.9
3	2.1	15	21	40	16	32	80	66	90	15	3.8	2.9
4	2.1	16	19	41	20	41	76	113	70	32	3.6	2.8
5	2.0	14	18	37	20	52	71	127	70	33	3.3	2.5
6	2.6	12	17	31	19	45	65	108	70	27	3.1	2.5
7	2.4	13	23	28	18	39	61	92	65	22	2.8	2.5
8	2.3	18	26	25	15	37	56	79	61	17	3.4	2.3
9	2.1	16	25	22	14	39	51	92	65	14	3.3	2.2
10	4.7	14	26	41	14	35	46	104	77	11	3.3	2.0
11	27	13	36	52	13	30	50	100	71	8.8	2.8	1.8
12	26	12	47	48	12	26	50	87	52	7.5	2.6	1.8
13	20	11	44	44	13	24	63	71	41	7.5	2.9	1.5
14	15	10	39	61	24	23	106	60	27	10	2.8	2.2
15	13	9.0	35	72	30	23	120	61	19	8.8	3.4	2.6
16	11	9.5	41	60	33	25	114	83	16	11	2.8	2.6
17	8.8	10	56	46	29	37	199	93	16	19	2.6	2.5
18	7.5	9.6	55	40	25	101	261	93	14	22	2.8	2.3
19	6.9	9.5	50	36	22	178	269	84	13	20	3.1	2.5
20	6.0	9.6	40	31	23	169	314	74	12	29	3.8	2.6
21	5.7	10	33	28	27	129	316	74	11	22	4.0	2.3
22	5.2	12	28	26	24	106	235	66	11	18	2.8	2.2
23	5.0	12	23	25	21	172	253	53	15	21	2.3	2.0
24	4.6	11	27	23	24	181	238	47	20	17	2.0	1.8
25	5.7	10	47	30	21	149	200	41	21	13	1.9	1.9
26	8.2	12	50	42	18	126	164	34	19	10	1.8	2.2
27	8.7	13	45	36	18	103	135	27	16	8.5	2.2	2.0
28	8.3	13	41	31	17	85	113	22	13	7.5	1.5	1.9
29	7.7	15	40	26	16	74	97	15	11	7.2	1.1	1.8
30	7.2	23	34	23	-----	77	87	16	11	5.9	6.4	2.2
31	6.6	-----	31	21	-----	77	-----	22	-----	5.2	4.7	-----
TOTAL	239.9	366.1	1,066	1,125	583	2,280	4,033	2,135	1,194	483.9	118.9	69.3
MEAN	7.74	12.2	34.4	36.3	20.1	73.5	134	68.9	39.8	15.6	3.84	2.31
MAX	27	23	56	72	33	181	316	127	114	33	15	3.6
MIN	2.1	6.1	17	21	12	19	46	15	11	5.2	1.8	1.8
CFSM	4.0	6.3	1.77	1.87	1.04	3.79	6.91	3.55	2.05	0.80	0.20	0.12
IN.	4.6	7.0	2.04	2.16	1.12	4.37	7.73	4.09	2.29	0.93	0.23	0.13

CAL YR 1971 TOTAL 9,664.14 MEAN 26.5 MAX 208 MIN .98 CFSM 1.37 IN 18.53
WTR YR 1972 TOTAL 13,694.10 MEAN 37.4 MAX 316 MIN 1.8 CFSM 1.93 IN 26.26

PEAK DISCHARGE (BASE, 190 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	1745	4.53	265				
3-23	2230	4.18	200				
4-20	2200	4.96	361				

NOTE.--No gage-height record Nov. 11 to Dec. 9.

167

LOCATION. Lat 42°35'18", long 72°02'59", Worcester County, on right bank at upstream side of Turner Street Bridge, 0.2 mile upstream from Bailey Brook, 0.6 mile southeast of Otter River, and 2 miles northwest of Gardner.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 900 ft (from topographic map).

AVERAGE DISCHARGE, --7 years (1965-72), 54.7 cfs (21.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 272 cfs Mar. 23 (gauge height, 3.27 ft); minimum, 6.7 cfs Sept. 11, 12.
Period of record: Maximum discharge, 637 cfs Mar. 19, 1960 (gauge height, 4.19 ft); minimum, 3.3 cfs Aug. 29-31, 1966.

REMARKS. --Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	19	93	74	97	99	119	109	214	87	21	13
2	9.9	39	81	71	33	79	140	104	284	82	19	12
3	9.4	47	47	47	33	114	191	114	213	49	10	13
4	9.1	44	91	79	97	141	147	142	148	49	16	17
5	7.8	41	43	72	99	122	131	210	146	65	10	14
6	8.1	94	79	66	94	109	127	190	131	63	16	13
7	8.6	99	79	61	90	109	126	193	112	99	14	11
8	8.3	98	97	99	47	101	117	133	99	47	14	10
9	7.8	94	79	49	39	92	109	194	112	40	13	9.6
10	79	91	79	99	97	99	100	171	201	39	14	8.1
11	44	79	89	109	30	79	100	199	227	33	14	7.4
12	9.9	77	119	119	30	47	101	133	175	30	13	7.4
13	49	79	114	117	99	49	119	110	127	21	11	7.0
14	40	79	40	129	90	47	177	91	107	37	12	13
15	79	71	87	122	85	47	190	114	82	34	20	16
16	79	77	79	77	90	01	190	199	79	39	14	19
17	10	79	97	90	79	194	200	166	67	28	19	13
18	19	77	100	49	49	294	294	183	60	28	19	22
19	18	77	49	47	46	294	310	167	94	17	19	19
20	20	74	79	46	80	279	310	129	94	42	14	20
21	20	74	66	46	49	102	350	191	94	39	12	18
22	20	79	49	46	49	189	270	129	60	31	11	16
23	20	77	46	46	49	194	267	108	94	32	11	14
24	20	74	49	47	47	318	287	89	119	33	12	12
25	20	77	49	49	40	294	297	66	122	30	11	17
26	27	70	101	94	90	109	214	61	128	29	11	17
27	79	70	46	90	40	107	170	97	121	27	11	13
28	79	70	46	90	44	101	191	92	99	24	11	11
29	79	70	79	49	40	107	100	46	77	23	70	11
30	79	79	77	41	41	107	110	46	79	20	21	11
31	79	79	70	46	46	109	109	45	79	20	17	11
32	79	79	79	46	46	109	109	45	79	20	17	11
33	79	79	79	46	46	109	109	45	79	20	17	11
34	79	79	79	46	46	109	109	45	79	20	17	11
35	79	79	79	46	46	109	109	45	79	20	17	11
36	79	79	79	46	46	109	109	45	79	20	17	11
37	79	79	79	46	46	109	109	45	79	20	17	11
38	79	79	79	46	46	109	109	45	79	20	17	11
39	79	79	79	46	46	109	109	45	79	20	17	11
40	79	79	79	46	46	109	109	45	79	20	17	11
41	79	79	79	46	46	109	109	45	79	20	17	11
42	79	79	79	46	46	109	109	45	79	20	17	11
43	79	79	79	46	46	109	109	45	79	20	17	11
44	79	79	79	46	46	109	109	45	79	20	17	11
45	79	79	79	46	46	109	109	45	79	20	17	11
46	79	79	79	46	46	109	109	45	79	20	17	11
47	79	79	79	46	46	109	109	45	79	20	17	11
48	79	79	79	46	46	109	109	45	79	20	17	11
49	79	79	79	46	46	109	109	45	79	20	17	11
50	79	79	79	46	46	109	109	45	79	20	17	11
51	79	79	79	46	46	109	109	45	79	20	17	11
52	79	79	79	46	46	109	109	45	79	20	17	11
53	79	79	79	46	46	109	109	45	79	20	17	11
54	79	79	79	46	46	109	109	45	79	20	17	11
55	79	79	79	46	46	109	109	45	79	20	17	11
56	79	79	79	46	46	109	109	45	79	20	17	11
57	79	79	79	46	46	109	109	45	79	20	17	11
58	79	79	79	46	46	109	109	45	79	20	17	11
59	79	79	79	46	46	109	109	45	79	20	17	11
60	79	79	79	46	46	109	109	45	79	20	17	11
61	79	79	79	46	46	109	109	45	79	20	17	11
62	79	79	79	46	46	109	109	45	79	20	17	11
63	79	79	79	46	46	109	109	45	79	20	17	11
64	79	79	79	46	46	109	109	45	79	20	17	11
65	79	79	79	46	46	109	109	45	79	20	17	11
66	79	79	79	46	46	109	109	45	79	20	17	11
67	79	79	79	46	46	109	109	45	79	20	17	11
68	79	79	79	46	46	109	109	45	79	20	17	11
69	79	79	79	46	46	109	109	45	79	20	17	11
70	79	79	79	46	46	109	109	45	79	20	17	11
71	79	79	79	46	46	109	109	45	79	20	17	11
72	79	79	79	46	46	109	109	45	79	20	17	11
73	79	79	79	46	46	109	109	45	79	20	17	11
74	79	79	79	46	46	109	109	45	79	20	17	11
75	79	79	79	46	46	109	109	45	79	20	17	11
76	79	79	79	46	46	109	109	45	79	20	17	11
77	79	79	79	46	46	109	109	45	79	20	17	11
78	79	79	79	46	46	109	109	45	79	20	17	11
79	79	79	79	46	46	109	109	45	79	20	17	11
80	79	79	79	46	46	109	109	45	79	20	17	11
81	79	79	79	46	46	109	109	45	79	20	17	11
82	79	79	79	46	46	109	109	45	79	20	17	11
83	79	79	79	46	46	109	109	45	79	20	17	11
84	79	79	79	46	46	109	109	45	79	20	17	11
85	79	79	79	46	46	109	109	45	79	20	17	11
86	79	79	79	46	46	109	109	45	79	20	17	11
87	79	79	79	46	46	109	109	45	79	20	17	11
88	79	79	79	46	46	109	109	45	79	20	17	11
89	79	79	79	46	46	109	109	45	79	20	17	11
90	79	79	79	46	46	109	109	45	79	20	17	11
91	79	79	79	46	46	109	109	45	79	20	17	11
92	79	79	79	46	46	109	109	45	79	20	17	11
93	79	79	79	46	46	109	109	45	79	20	17	11
94	79	79	79	46	46	109	109	45	79	20	17	11
95	79	79	79	46	46	109	109	45	79	20	17	11
96	79	79	79	46	46	109	109	45	79	20	17	11
97	79	79	79	46	46	109	109	45	79	20	17	11
98	79	79	79	46	46	109	109	45	79	20	17	11
99	79	79	79	46	46	109	109	45	79	20	17	11
100	79	79	79	46	46	109	109	45	79	20	17	11

CONNECTICUT RIVER BASIN

01164000 Millers River at South Royalston, Mass.

LOCATION.--Lat 42°37'47", long 72°09'03", Worcester County, on right bank 500 ft downstream from bridge in South Royalston, 0.4 mile downstream from Beaver Brook, 1.7 miles downstream from Birch Hill Dam, and at mile 25.5.

DRAINAGE AREA.--187 sq mi.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 792.00 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years, 306 cfs (22.22 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,090 cfs Apr. 22 (gage height, 7.19 ft); minimum daily, 48 cfs Sept. 12.

Period of record: Maximum discharge, 4,400 cfs Apr. 13, 1940 (gage height, 8.40 ft); maximum gage height, 9.42 ft Jan. 24, 1959 (backwater from ice); minimum daily discharge, 9.3 cfs Aug. 4, 1956. Maximum discharge since construction of Birch Hill Reservoir in 1941, 2,830 cfs June 25, 26, 1944 (gage height, 7.57 ft).

Flood of Sept. 21 or 22, 1938, reached a stage of 15.9 ft, from floodmarks (discharge not determined).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Lake Monomac and other reservoirs, by mills and powerplants prior to 1955, and at high flow by Birch Hill Reservoir (see p. 207).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	82	428	320	210	229	675	863	938	381	79	79
2	73	129	353	365	200	316	740	785	1,360	351	62	70
3	69	264	300	445	191	435	779	792	1,260	307	77	65
4	66	240	251	440	241	573	766	1,040	970	403	76	70
5	68	193	195	415	280	581	727	1,180	820	372	71	71
6	77	161	205	370	255	546	681	1,240	792	335	65	67
7	70	161	252	320	235	480	662	1,080	688	288	64	60
8	62	193	390	280	215	481	628	954	601	240	70	58
9	56	170	359	290	200	507	576	954	619	210	68	55
10	85	149	340	460	190	474	547	1,010	863	176	76	52
11	279	141	427	574	185	407	544	970	1,020	191	70	69
12	271	133	539	561	180	356	548	870	885	129	64	68
13	198	141	509	514	175	322	624	766	688	124	63	69
14	163	138	443	619	354	316	878	662	591	167	63	63
15	138	131	356	664	434	259	1,030	761	465	168	82	84
16	128	131	447	490	459	376	1,020	893	389	129	79	93
17	109	133	559	430	402	526	1,200	986	368	157	73	100
18	87	129	541	380	328	863	1,440	930	335	146	71	133
19	84	136	424	354	227	1,050	1,720	848	315	141	84	146
20	90	137	407	319	298	1,190	1,640	772	307	200	77	197
21	98	163	391	307	328	1,220	1,610	759	296	185	67	143
22	85	156	314	287	310	1,070	2,000	760	303	154	63	136
23	88	159	290	277	300	1,410	2,000	693	398	148	60	131
24	94	159	314	278	278	1,600	1,990	573	460	159	63	121
25	98	119	470	300	250	1,470	2,000	491	495	161	60	117
26	116	158	520	340	334	1,220	1,900	430	495	181	60	117
27	109	169	476	419	330	1,010	1,810	376	480	186	63	117
28	101	159	452	380	225	861	1,650	367	430	96	60	106
29	98	165	423	270	312	783	1,390	319	395	89	59	119
30	96	132	384	295	259	759	1,050	262	331	86	126	121
31	88	136	345	239	230	720	1,000	231	331	77	96	121
TOTAL	3,206	4,777	12,380	11,929	7,642	22,360	34,825	23,609	18,287	5,913	2,963	2,817
MEAN	103	154	398	384	246	724	1,124	762	590	191	89	91
MAX	279	252	559	664	459	1,600	2,000	1,990	1,360	403	76	197
MIN	56	80	195	250	175	229	544	601	240	48	60	52
MEAN†	106	160	390	385	253	729	1,165	764	609	190	89.9	93.9
CFM†	97	96	2,58	2,58	1,41	2,88	4,23	4,03	3,26	1,02	63	80
CM†	9.0	9.6	2,60	2,57	1,42	4,07	6,56	4,05	3,63	1,17	60	96
COI TO 1971	TOTAL	94,399	MEAN	272	MAX	1,430	MIN	58	MEAN†	272	CFM†	1,40
WFO TO 1972	TOTAL	108,447	MEAN	410	MAX	2,000	MIN	48	MEAN†	410	CFM†	2,19
												19,75
												20,96

† Adjusted for change in contents in Birch Hill Reservoir.

CONNECTICUT RIVER BASIN

169

01165000 East Branch Tully River near Athol, Mass.

LOCATION.--Lat 42°38'32", long 72°13'34", Worcester County, on right bank 300 ft downstream from Tully Dam, 1.3 miles downstream from Lawrence Brook, 3.5 miles north of Athol, and 4.9 miles upstream from mouth.

DRAINAGE AREA.--50.4 sq mi.

PERIOD OF RECORD.--October 1915 to current year. October 1915 to May 1916 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 613.71 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 26, 1948, nonrecording gage at site 0.2 mile upstream at datum 14.40 ft higher.

AVERAGE DISCHARGE.--57 years, 79.8 cfs (21.50 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 708 cfs Apr. 26 (gage height, 4.83 ft); minimum, 0.35 cfs Aug. 23, 24; minimum daily, 0.42 cfs Aug. 20-23.

Period of record: Maximum discharge, 5,140 cfs Sept. 21, 1938 (gage height, 8.60 ft, from floodmarks, site and datum then in use), from rating curve extended above 1,500 cfs on basis of contracted-opening measurement and computation of peak flow over dam; minimum, 0.01 cfs Nov. 6-11, 1961; minimum daily, 0.01 cfs Nov. 7-10, 1961. Maximum discharge since construction of Tully Reservoir in 1948, 828 cfs Apr. 21, 1960 (gage height, 5.38 ft).

REMARKS.--Records excellent below 100 cfs, good above. Flow regulated by Tully Reservoir since 1948 (see p. 207).

REVISIONS (WATER YEARS).--WSP 451: 1916. WSP 891: Drainage area. WSP 1051: 1916(M), 1928. WSP 1301: 1917-35(M), 1937(M).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	29	40	89	54	28	170	337	123	75	9.2	1.5
2	2.2	18	63	87	41	46	170	220	249	87	9.2	1.7
3	2.1	18	73	88	41	55	190	147	267	87	9.2	1.7
4	1.9	27	73	89	41	57	215	241	256	87	9.2	1.5
5	1.9	38	72	89	42	58	213	249	161	100	9.2	1.5
6	1.8	38	70	89	42	80	203	267	125	105	8.2	1.7
7	14	38	69	88	43	43	193	213	164	94	8.2	1.2
8	14	38	70	87	43	92	180	234	180	61	8.2	9.0
9	4.5	38	69	85	43	92	147	206	107	54	8.2	7.9
10	2.5	38	70	84	43	91	130	223	97	79	8.2	6.9
11	31	38	70	85	42	90	118	245	133	123	8.2	6.4
12	48	38	71	87	42	88	113	210	161	84	8.2	6.4
13	79	38	97	87	42	87	128	174	183	21	8.2	6.2
14	36	38	109	90	42	85	158	110	158	19	8.2	6.6
15	14	38	109	93	43	84	183	180	78	19	8.2	6.9
16	16	38	109	96	37	82	196	220	94	20	278	4.9
17	16	38	110	120	84	82	271	256	94	20	110	9.2
18	16	38	117	133	83	88	430	240	94	20	110	9.2
19	16	38	120	128	83	109	505	186	94	21	110	9.2
20	44	38	164	189	91	260	371	190	94	48	110	9.2
21	95	38	161	123	79	260	305	193	97	89	110	9.2
22	98	38	152	118	77	252	362	147	28	88	110	9.2
23	97	38	86	88	91	256	409	144	28	97	110	9.2
24	96	38	55	73	32	282	439	186	95	98	110	9.2
25	95	38	56	73	28	284	340	81	96	34	110	9.2
26	95	38	98	74	27	290	608	93	110	95	110	9.2
27	96	38	80	75	27	275	475	93	88	28	110	9.2
28	93	38	90	75	27	275	362	94	79	23	110	9.2
29	42	38	91	75	28	280	374	95	99	23	110	9.2
30	35	38	91	75	28	280	374	95	99	23	110	9.2
31	95	38	90	74	28	280	374	95	99	23	110	9.2
TOTAL	954.1	1,094	2,780	2,845	1,405	4,550	9,471	5,038	5,344	1,452.2	484.05	115.9
MEAN	30.8	35.3	89.7	92.1	45.3	147	292	168	177	46.7	15.4	3.8
NO. 0	79	94	164	193	84	284	608	339	287	123	278	4.9
NO. 1	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 2	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 3	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 4	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 5	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 6	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 7	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 8	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 9	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 10	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 11	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 12	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 13	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 14	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 15	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 16	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 17	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 18	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 19	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 20	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 21	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 22	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 23	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 24	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 25	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 26	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 27	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 28	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 29	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 30	10	18	40	73	41	55	190	220	249	87	9.2	1.7
NO. 31	10	18	40	73	41	55	190	220	249	87	9.2	1.7

COEFF. OF CORR. 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999, 0.999

Adjusted for storage in contents in Tully Reservoir.

CONNECTICUT RIVER BASIN

0115300 Lake Rohunta Outlet near Athol, Mass.

LOCATION.--Lat 42°34'13", long 72°16'22", Worcester County, on right bank 300 ft downstream from bridge on Daniel Shays Highway, 600 ft downstream from Lake Rohunta, and 2.8 miles southwest of Athol.

DRAINAGE AREA.--20.3 sq mi.

PERIOD OF RECORD.--December 1964 to current year

GAGE.--Water-stage recorder. Datum of gage is 503.32 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1965-72), 31.5 cfs.

EXTREMES.--Current year: Maximum discharge, 496 cfs June 29 (gage height, 5.52 ft), from rating curve extended above 240 cfs; minimum daily, 0.52 cfs July 22.
Period of record: Maximum discharge, 496 cfs June 29, 1972 (gage height, 5.52 ft), from rating curve extended above 240 cfs; minimum daily, 0.17 cfs June 3, 4, 1971.

REMARKS.--Records good except those for period of no-gage-height record, which are fair. Flow regulated by Lake Rohunta.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	8.9	48	36	25	22	81	66	17	90	6.7	16
2	5.4	11	41	37	24	27	82	66	141	60	6.6	12
3	4.9	12	28	43	24	46	87	67	141	70	7.1	10
4	4.9	13	19	45	23	62	88	85	109	59	5.1	9.3
5	5.6	14	20	40	32	69	85	105	91	61	7.4	7.1
6	9.2	14	25	36	30	65	80	108	62	48	8.7	6.2
7	11	15	77	32	28	57	81	94	49	37	5.6	4.9
8	12	42	19	30	25	57	74	85	53	29	11	4.3
9	12	39	40	29	23	59	65	88	62	24	5.6	3.1
10	14	28	40	40	19	51	66	92	93	28	6.7	3.6
11	23	21	44	60	17	51	65	87	165	22	7.4	2.8
12	23	18	51	56	15	49	65	77	161	19	8.0	2.2
13	22	17	55	50	18	46	72	71	94	18	6.6	4.0
14	20	17	53	66	25	46	90	62	73	19	6.2	7.4
15	18	15	53	70	31	55	105	69	60	19	5.9	9.7
16	17	16	53	55	34	50	105	85	51	16	5.6	9.4
17	16	16	54	40	35	67	128	91	48	15	6.2	9.0
18	15	17	53	34	33	113	156	87	44	9.4	6.8	5.9
19	14	18	43	31	40	155	153	77	39	3.2	6.8	5.5
20	13	15	37	28	41	145	148	70	67	7.0	5.6	6.5
21	12	15	33	28	25	120	154	69	59	6.0	5.9	6.5
22	11	13	30	27	28	125	148	65	45	5.2	5.1	5.9
23	11	13	28	28	19	190	151	60	40	1.0	4.7	5.3
24	9.6	13	33	28	28	222	158	53	43	3.1	3.6	5.6
25	11	17	50	36	27	186	144	66	48	6.5	3.6	5.1
26	13	19	46	50	28	144	124	35	51	8.3	3.0	5.3
27	13	16	46	46	28	114	105	33	40	5.6	3.6	4.5
28	13	16	42	40	27	96	90	39	45	11	16	3.6
29	10	17	40	36	20	86	80	26	78	10	17	3.6
30	9.6	34	38	35	-----	85	73	11	76	9.8	19	5.3
31	9.7	-----	35	38	-----	87	-----	7.0	-----	8.7	18	-----
TOTAL	385.1	570.5	2,258	1,285	770	2,742	2,100	2,098.70	2,154	234.22	247.9	187.0
MEAN	12.4	18.1	41.2	39.9	28.6	86.5	66	66.6	71.8	23.7	6.00	6.23
MAX	23	82	77	72	41	222	198	108	165	98	16	16
MIN	4.9	8.9	20	28	15	22	65	69	17	5.2	5.0	2.2
NO. OF DAYS	31	31	31	31	31	31	31	31	31	31	31	31

NOTE.--No gage-height record Dec. 18 to Jan. 20.

CONNECTICUT RIVER BASIN

171

01165500 Moss Brook at Wendell Depot, Mass.

LOCATION.--Lat 42°36'10", long 72°21'36", Franklin County, on left bank 0.2 mile upstream from mouth, 0.2 mile north of Wendell Depot, and 2.5 miles west of Orange.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--June to October 1909, April to August 1910, June 1916 to current year. Published as "at Wendell" 1909-10.

GAGE.--Water-stage recorder. Crest-stage gage since July 11, 1958. Datum of gage is 508.9 ft above mean sea level. Prior to April 1910, nonrecording gage at site 1,200 ft downstream at different datum. April to August 1910, nonrecording gage and sharp-crested weir at site 300 ft downstream at different datum. June 1916 to Dec. 8, 1965, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--56 years (1916-72), 19.8 cfs (21.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 199 cfs Mar. 23 (gage height, 3.39 ft); maximum gage height, 3.64 ft Mar. 18 (backwater from ice); minimum, 2.0 cfs Oct. 4-6, Sept. 11, 12.

Period of record: Maximum discharge, 1,540 cfs Mar. 19, 1936 (gage height, 6.30 ft, from floodmarks), from rating curve extended above 400 cfs on basis of slope-area measurements at gage heights 5.62 and 6.30 ft; minimum, 0.2 cfs Sept. 4, 5, 1929.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 821: 1936(M). WSP 891: Drainage area. WSP 1051: 1917, 1919-24, 1929(m). WSP 1231: 1917-21(M), 1922, 1923(M), 1924-26, 1927-28(M), 1929, 1930-35(M), 1939(M), 1941(M), 1944(M), 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.2	30	18	12	11	35	31	92	47	5.2	4.9
2	2.4	7.3	34	20	12	14	44	33	84	32	4.9	4.1
3	2.1	12	28	26	11	20	47	40	45	24	4.6	3.6
4	2.0	11	20	26	16	22	42	71	32	42	4.9	3.4
5	2.0	8.5	18	22	19	22	38	76	34	32	4.2	3.0
6	2.0	6.9	20	18	16	19	34	53	30	24	3.5	2.6
7	2.2	9.3	21	16	14	15	33	40	31	18	3.5	2.5
8	2.1	13	22	16	13	16	31	36	31	14	5.1	2.3
9	2.0	11	19	17	12	17	28	57	35	12	4.6	2.3
10	12	8.5	18	27	11	15	27	58	50	11	4.3	2.1
11	30	7.8	27	31	11	14	29	42	48	9.6	5.2	2.0
12	21	7.3	37	28	10	13	30	35	33	8.1	3.5	2.0
13	12	7.1	33	25	10	13	43	30	25	8.3	3.4	2.5
14	7.8	8.5	26	37	14	13	92	26	20	13	3.8	5.6
15	6.1	5.9	23	43	16	13	82	46	15	11	5.2	9.8
16	5.4	6.5	28	34	17	14	66	77	14	8.5	4.3	4.2
17	4.6	7.3	40	29	15	33	148	65	16	48	3.9	3.5
18	4.3	7.3	36	23	13	120	147	55	14	40	4.0	2.9
19	4.0	8.9	28	19	12	104	116	45	12	23	4.8	3.1
20	4.0	7.1	22	17	14	70	136	38	12	37	4.0	4.0
21	3.6	6.9	20	17	13	54	142	43	12	28	3.2	3.3
22	3.5	8.3	18	16	11	61	88	38	11	18	2.8	3.1
23	3.4	9.0	16	15	11	165	113	30	12	21	2.6	2.7
24	3.4	7.3	14	16	11	115	105	25	21	21	2.5	2.6
25	7.1	7.5	29	21	10	74	77	21	27	15	2.5	3.1
26	9.5	8.3	29	30	11	53	58	18	46	11	2.4	7.0
27	8.8	8.8	25	28	11	42	48	16	28	8.5	2.6	7.9
28	7.3	9.0	23	19	10	36	41	15	30	7.4	4.2	13
29	5.9	11	23	17	10	34	36	13	18	7.0	28	8.6
30	4.9	29	20	15	10	37	33	12	24	5.6	12	8.6
31	4.5	-----	21	15	-----	36	-----	17	-----	4.7	7.0	-----
TOTAL	192.5	266.5	780	699	366	1,205	1,489	1,202	980	609.7	194.5	124.3
MEAN	6.21	8.58	25.2	22.5	12.0	41.5	48.3	38.8	31.6	19.7	6.27	4.14
MAX	32	29	48	45	19	145	148	77	48	48	4.2	13
MIN	2.0	4.2	16	13	10	11	27	12	11	4.7	2.4	2.0
COEFF	1.00	1.72	2.85	1.88	1.02	3.37	3.39	3.15	2.65	1.40	1.51	1.34
1%	1.00	1.81	2.56	2.11	1.11	3.09	3.02	2.64	2.23	1.36	1.50	1.39
COEFF 1971	COEFF 1972	COEFF 1973	COEFF 1974	COEFF 1975	COEFF 1976	COEFF 1977	COEFF 1978	COEFF 1979	COEFF 1980	COEFF 1981	COEFF 1982	COEFF 1983
0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79

PEAK DISCHARGE BASE, 100 CFS

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	--	--	178	4-18	0100	3.29	178
5-23	0100	5.20	178	6-25	2300	3.31	182

1. About.

CONNECTICUT RIVER BASIN

01166500 Millers River at Erving, Mass.

LOCATION.--Lat 42°35' 51", long 72°26' 19", Franklin County, on right bank 75 ft downstream from bridge at Farley, 0.6 mile upstream from Mormon Hollow Brook, 2.4 miles downstream from Erving, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--375 sq mi.

PERIOD OF RECORD.--August 1914 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (from topographic map). Prior to June 30, 1915, nonrecording gage, June 30, 1915, to Sept. 20, 1938, water-stage recorder, and Sept. 21 to Dec. 31, 1938, nonrecording gage, at site 2.2 miles upstream at different datum. Jan. 1 to Mar. 29, 1939, nonrecording gage, and Mar. 30, 1939, to Sept. 12, 1941, water-stage recorder, at site 0.4 mile downstream at different datum.

AVERAGE DISCHARGE.--58 years, 611 cfs (22.13 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,040 cfs Apr. 23 (gage height, 6.17 ft); minimum daily, 57 cfs Aug. 27.
Period of record: Maximum discharge, 29,000 cfs Sept. 22, 1938 (gage height, 13.37 ft, from floodmarks, site and datum then in use), mean of two slope-area measurements; practically no flow at times during 1915 and 1916 because of regulation; minimum daily, 8 cfs Sept. 6, 1926.

REMARKS.--Records excellent except those for period of doubtful or no gage-height record, which are fair. Flow regulated by powerplants, Lake Monomonic and other reservoirs, and high flow, by Birch Hill Reservoir 22 miles upstream and Tully Reservoir (see p. 207); greater regulation by powerplants prior to 1966.

REVISIONS (WATER YEARS).--WSP 641: 1920(M). WSP 756: Drainage area. WSP 781: 1928(M), 1933(M). WSP 1301: 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	212	850	544	444	442	1,360	1,730	1,720	830	195	189
2	161	258	700	733	448	553	1,490	1,610	2,280	735	182	137
3	139	486	660	880	431	807	1,540	1,440	2,150	655	183	66
4	123	431	560	880	510	962	1,530	1,990	1,400	860	206	124
5	125	391	500	806	553	979	1,450	2,210	1,580	765	176	128
6	130	328	540	640	480	874	1,370	2,090	1,310	640	165	124
7	137	360	620	620	500	852	1,330	1,970	1,230	605	159	115
8	133	465	720	540	400	890	1,240	1,680	1,150	500	176	105
9	123	446	684	600	410	890	1,150	1,880	1,240	425	172	103
10	237	371	677	897	390	890	1,070	1,820	1,530	395	173	97
11	591	332	834	1,030	360	789	1,080	1,730	1,710	400	166	90
12	584	314	1,000	1,030	350	717	1,060	1,600	1,620	390	155	88
13	464	278	920	969	370	666	1,290	1,380	1,320	295	145	96
14	375	289	830	1,220	553	653	1,830	1,210	1,060	360	144	144
15	286	298	812	1,220	723	588	2,000	1,360	894	330	170	174
16	261	294	911	921	771	679	1,970	1,770	735	380	201	162
17	243	294	1,070	727	793	1,200	2,850	1,840	673	435	406	161
18	226	286	1,030	852	684	2,170	3,240	1,780	617	400	215	178
19	197	298	851	816	534	2,230	3,370	1,610	574	395	170	211
20	167	290	853	765	480	2,260	3,700	1,380	583	905	164	232
21	133	300	799	704	549	2,270	3,150	1,380	562	470	143	237
22	219	329	717	696	606	2,400	3,350	1,300	524	425	128	194
23	215	330	509	645	510	3,610	3,870	1,190	546	390	122	195
24	218	310	680	609	453	3,380	3,690	1,030	788	415	61	187
25	277	298	870	796	425	2,880	3,560	879	894	355	61	184
26	302	330	994	748	410	2,370	3,450	751	942	310	101	176
27	246	340	884	666	413	2,610	3,210	687	915	290	57	181
28	261	360	796	704	415	1,720	2,740	608	880	245	470	189
29	286	370	617	614	495	1,560	2,370	583	885	225	410	186
30	216	780	743	558	-----	1,560	2,020	911	679	210	299	189
31	218	-----	685	567	-----	1,470	-----	950	-----	205	228	-----
TOTAL	7,414	10,341	24,081	24,027	14,640	45,271	67,330	63,517	33,211	13,770	9,963	4,644
MEAN	239	335	777	776	472	1,460	2,174	1,404	1,072	444	192	146
MAX	591	740	1,070	1,220	793	3,610	3,870	2,710	2,290	880	406	237
MIN	123	212	540	547	360	442	1,060	511	574	205	57	66
MEAN ¹	240	366	770	771	499	1,460	2,099	1,386	1,107	443	184	157
CFRMT	0.64	0.92	2.08	2.06	1.33	4.91	6.25	1.70	2.95	1.16	0.60	0.42
IN.1	0.74	1.03	2.40	2.37	1.43	4.51	6.75	4.25	3.29	1.38	0.67	0.47

CAL. YR 1971 TOTAL 140,640 MEAN 522 MAX 2,790 CFRMT 0.70 IN.1 10.91
 YR 1972 TOTAL 290,097 MEAN 922 MAX 2,070 CFRMT 2.14 IN.1 29.10

¹ Adjusted for change in contents in Birch Hill and Tully Reservoirs.
 CFRMT.--Computed) or no gage-height record June 27 to Aug. 1.

CONNECTICUT RIVER BASIN

173

01167000 Connecticut River at Turners Falls, Mass.

LOCATION.--Lat 42°36'40", long 72°33'20", Franklin County, at dam of Western Massachusetts Electric Co., at Turners Falls, 0.2 mile upstream from Falls River, and at mile 122.2.

DRAINAGE AREA.--7,163 sq mi.

PERIOD OF RECORD.--January 1915 to current year.

AVERAGE DISCHARGE.--57 years, 11,650 cfs (22.09 inches per year), adjusted for storage.

REMARKS.--Discharge computed by adding flow over and through dam, flow for factories through canal that diverts around dam, and flow through power stations 1 and 2 of Western Massachusetts Electric Co. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 207), and other reservoirs (combined usable capacity, about 35 billion cubic feet).

COOPERATION.--Records furnished by Western Massachusetts Electric Co.

REVISIONS (WATER YEARS).--WSP 741: 1932. WSP 891: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,810	4,930	6,010	2,520	7,000	6,330	17,600	44,500	15,400	15,900	7,420	5,820
2	1,950	5,140	4,150	5,410	6,100	7,640	20,800	51,500	18,200	8,110	7,200	3,720
3	138	4,680	4,220	7,540	6,560	12,700	20,300	58,300	18,900	9,530	5,850	2,370
4	3,530	4,520	2,910	7,670	6,410	12,100	19,200	68,000	16,800	12,800	7,020	534
5	3,860	5,070	2,890	10,500	6,600	10,500	18,700	75,400	18,200	12,300	7,570	2,770
6	4,740	1,660	4,820	7,750	2,270	11,700	18,400	75,000	14,300	11,700	4,820	4,010
7	4,360	2,680	4,980	6,560	7,420	9,300	16,800	74,100	13,000	11,400	6,550	2,230
8	4,540	5,580	6,350	5,010	6,520	8,690	15,800	73,100	13,800	7,960	5,500	4,000
9	2,530	5,580	7,230	4,000	6,710	8,250	14,700	70,000	14,000	5,490	5,320	2,300
10	3,010	5,100	6,960	6,300	7,860	11,200	13,000	67,000	13,200	7,440	5,020	1,260
11	8,140	5,130	7,500	9,040	7,070	8,940	12,700	60,200	15,200	7,080	7,780	2,200
12	9,000	5,010	7,710	7,160	4,500	6,920	15,300	45,600	14,100	16,000	5,180	2,690
13	6,640	6,240	12,700	8,190	3,210	6,790	18,200	40,500	13,900	12,200	2,300	2,910
14	5,990	585	10,400	7,160	7,480	7,860	23,000	35,000	13,400	11,000	4,780	4,140
15	3,350	3,630	7,880	8,840	9,710	8,630	22,700	25,800	12,000	5,070	5,310	3,840
16	2,460	2,940	8,230	8,200	4,860	8,900	21,100	33,300	12,300	3,560	3,910	2,020
17	90	3,620	12,000	9,010	7,490	11,200	31,000	38,100	11,200	6,680	4,700	982
18	4,170	4,210	11,200	8,340	7,570	14,600	41,900	43,500	7,860	9,660	5,310	2,860
19	4,640	4,470	7,610	8,900	7,250	20,000	53,600	39,000	8,850	8,700	2,880	3,820
20	4,100	4,070	7,390	10,000	5,240	20,900	60,000	31,800	12,300	8,550	2,340	3,490
21	3,900	1,340	8,820	10,100	4,860	18,400	58,100	28,900	11,500	7,740	4,280	1,850
22	4,490	6,590	7,230	6,400	4,500	18,700	54,300	27,400	10,500	8,430	5,370	3,220
23	3,480	6,560	4,310	9,870	5,800	29,700	53,400	21,900	6,290	11,100	3,220	1,470
24	2,340	3,640	4,230	5,890	4,060	29,400	52,300	19,000	12,100	12,700	3,570	1,450
25	4,170	2,610	8,090	7,950	4,640	26,600	54,700	14,000	13,000	17,900	5,360	2,840
26	7,100	1,800	7,090	7,380	6,580	23,200	54,000	12,800	13,700	14,100	2,920	2,000
27	6,010	2,650	7,940	4,710	3,730	19,700	49,000	12,800	17,500	13,000	1,910	3,320
28	6,800	2,120	9,220	7,280	9,730	17,800	42,400	8,760	13,800	10,900	7,940	2,900
29	7,000	4,830	6,150	7,140	5,400	17,000	38,300	7,130	10,600	10,200	8,540	1,810
30	2,010	6,220	11,600	4,690	-----	18,200	38,400	8,750	10,400	7,770	6,380	3,200
31	342	-----	8,220	6,810	-----	17,400	-----	9,150	-----	8,380	4,130	-----
TOTAL	129,630	124,045	231,080	223,920	187,010	448,290	945,880	1,220,180	397,380	317,190	340,000	62,104
MEAN	4,182	4,003	7,454	7,223	6,034	14,460	30,510	39,440	13,240	10,230	10,630	2,003
MAX	9,000	6,590	12,700	10,500	9,710	29,700	60,000	75,400	18,900	17,900	6,550	4,000
MIN	90	585	2,890	2,270	2,270	6,330	12,700	7,130	4,290	3,560	1,910	534
MEAN†	3,730	3,791	6,998	6,801	5,322	13,630	30,800	42,980	13,240	10,560	10,631	2,166
CFSM†	.52	.53	.97	.98	.74	1.87	4.38	6.00	1.86	1.44	.85	.30
IN.†	.60	.59	1.12	1.08	.80	2.16	5.11	6.92	2.07	1.67	.75	.34
CAL YR 1971	TOTAL 3,720,894	MEAN 10,190	MAX 26,700	MIN 0	MEAN† 10,170	CFSM† 1.42	INF 19.22					
YR 1972	TOTAL 4,481,001	MEAN 12,220	MAX 29,400	MIN 50	MEAN† 12,220	CFSM† 1.71	INF 23.22					

† Expressed in thousands.

† Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to Tully Reservoir on East Branch Tully River listed on p. 207.

01167800 Beaver Brook at Wilmington, Vt.

DRAINAGE AREA.--6.38 sq mi.

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map).

AVERAGE DISCHARGE. --9 years, 14.2 cfs (30.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 471 cfs Apr. 19 (gage height, 5.53 ft), from rating curve extended above 160 cfs, on basis of slope-area measurement at gage height 8.61 ft; minimum, 0.67 cfs Sept. 10, 12, 13.
Period of record: Maximum discharge, 892 cfs (revised) Nov. 6, 1969 (gage height, 7.51 ft), from rating curve extended above 160 cfs on basis of slope-area measurement at gage height 8.61 ft, caused by dam failure; maximum gage height, 8.73 ft Jan. 19, 1965 (ice jam); minimum discharge, 0.06 cfs Aug. 1, 1965.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WSP 1901 and WRD Mass., N.H., R.I., Vt., 1963, 1964, 1967-71.

Water year	Date	Discharge (cfs)	Gage height (feet)
1963	Apr. 3, 1963	276	4.52
1964	Apr. 14, 1964	348	4.90
1967	Nov. 3, 1966	377	5.05
1968	Oct. 26, 1967	327	4.79
1969	June 15, 1969	883	7.47
1970	Nov. 6, 1969	892	7.51
1971	May 3, 1971	237	4.22

REMARKS. --Records good except those for winter period and periods of no gage-height record, which are fair. Records of suspended-sediment loads for the current year are published in Part 2 of this report. Recording rain gage at station since April 1964 (no winter records).

REVISIONS (WATER YEARS).--Revised figures of discharge, in cubic feet per second, for high-water periods in water years 1964, 1967-70, superseding figures published in WSP 1901 and WRD Mass., N.H., R.I., Vt., 1964, 1967-71, are given herewith:

Date	Discharge	Date	Discharge
1969		1969	
Apr. 10	245	July 29	184
22	180	Nov. 6	116
23	360	8	345
June 15	187	20	158

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
April 1969	2,840	360	12	94.7	14.8	16.56
June 1969	741.5	187	4.2	24.7	3.87	4.32
July 1969	381.1	184	1.5	12.3	1.93	2.22
WTR YR 1969	6,692.46	360	.47	18.3	2.87	39.02
November 1969	1,535.0	345	2.1	51.2	8.03	8.95
CAL YR 1969	7,746.42	360	.93	21.2	3.32	45.17
WTR YR 1970	6,293.83	345	.16	17.2	2.70	36.70
Revised peak discharge.--1964:						
1967: Nov. 9 (130) 327 cfs (5.05 ft); Apr. 3 (1215) 295 cfs (4.62 ft).						
1968: Oct. 26 (2215) 327 cfs (4.79 ft); Mar. 19, about 260 cfs; Apr. 25, about 320 cfs.						
1969: Nov. 29 (4030) 343 cfs (4.98 ft); Dec. 4 (2215) 287 cfs (4.58 ft); Apr. 5 (1130)						
252 cfs (4.39 ft); Apr. 10 (2015) 535 cfs (5.95 ft); Apr. 22 or 23, 846 cfs (7.30 ft).						
June 15 (1545) 883 cfs (7.47 ft); July 29 (2543) 680 cfs (6.26 ft).						
1970: Nov. 6 (0800) 892 cfs (7.51 ft); Nov. 8 (0245) 729 cfs (6.77 ft); Nov. 20 (0315)						
586 cfs (6.10 ft); Apr. 24 (1830) 291 cfs (4.59 ft).						
1971: Apr. 20 (1745) 234 cfs (4.20 ft); May 3 (2200) 237 cfs (4.22 ft); May 13 (1430) 236 cfs						
(4.21 ft); Aug. 28 (1100) 224 cfs (4.19 ft).						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8											
2	1.7	3.3	6.8	10	8.0	13	17	123	62	60	1.9	1.4
3	1.7	10	6.2	12	8.0	22	19	155	24	26	1.8	1.3
4	1.8	10	5.8	23	8.5	30	17	170	15	27	2.2	1.3
5	1.6	5.2	5.5	15	16	20	16	164	12	43	1.9	1.2
			5.2	10	13	15	15	92	20	17	1.6	1.1
6	1.4	5.2	10	10	11	13	14	62	14	14	1.5	1.1
7	1.8	10	40	9.6	9.0	14	14	56	29	10	1.5	.95
8	1.4	8.9	25	9.0	8.0	12	13	62	19	7.6	3.5	.76
9	1.4	6.3	15	11	7.4	12	13	111	36	8.0	2.5	.85
10	24	5.9	20	22	6.8	12	13	57	20	6.3	1.8	.76
11	19	5.9	60	20	6.4	12	14	38	14	4.9	1.5	.76
12	8.9	5.9	39	16	6.0	11	16	28	12	4.5	1.3	.67
13	6.3	5.9	23	16	9.0	9.3	26	22	9.7	4.0	1.2	1.1
14	5.2	5.2	17	30	25	9.3	54	20	8.4	4.0	1.2	3.0
15	4.3	4.9	18	19	19	12	41	47	7.2	3.4	1.3	3.6
16	4.0	8.0	66	13	12	9.5	53	41	6.8	3.1	1.2	2.2
17	3.6	7.6	43	10	9.0	40	150	32	6.8	3.5	1.2	1.3
18	3.3	7.6	24	14	8.0	50	135	43	5.2	2.8	1.3	1.3
19	3.0	9.3	16	14	11	25	220	30	4.6	2.5	1.4	1.4
20	3.0	11	14	12	10	20	195	27	5.2	6.0	1.3	1.4
21	3.0	9.3	13	11	9.5	17	80	28	4.6	4.0	1.1	1.2
22	3.0	8.0	11	10	9.2	27	60	20	9.3	2.5	1.0	1.2
23	2.4	6.8	9.0	12	9.0	52	90	16	42	4.0	.95	1.2
24	2.7	4.9	15	9.5	8.8	30	120	13	113	5.0	.90	1.1
25	7.2	4.9	25	18	8.6	23	97	10	67	4.5	1.0	1.2
26	7.2	7.2	21	17	8.4	19	77	8.9	68	3.2	1.0	1.2
27	5.2	8.4	17	12	8.0	16	60	7.2	30	4.2	1.4	1.2
28	4.3	7.6	21	10	7.5	16	58	5.9	21	3.2	6.0	1.2
29	4.0	6.8	18	9.4	7.0	16	83	5.2	15	2.6	2.5	1.1
30	3.6	7.6	14	8.8	-----	17	103	4.9	106	2.3	1.8	1.6
31	3.3	-----	12	8.4	-----	15	-----	21	-----	2.0	1.5	-----
TOTAL	145.1	213.9	635.5	421.7	287.1	609.1	1,883	1,520.1	806.8	295.1	52.25	39.65
MEAN	4.68	7.13	20.5	13.6	9.90	19.6	62.8	49.0	26.9	9.52	1.69	1.32
MAX	24	11	66	30	23	52	220	170	113	60	6.0	3.6
MIN	1.4	3.3	5.2	8.4	6.0	9.3	13	4.9	4.6	2.0	.90	.67
CFSM	.73	1.12	3.21	2.13	1.55	3.07	9.84	7.68	4.22	1.49	.26	.21
IN.	.85	1.25	3.71	2.46	1.67	3.55	10.98	8.86	4.70	1.72	.30	.23
CAL YR 1971	TOTAL 5,441.31	MEAN 14.9	MAX 154	MIN .46	CFSM 2.34	IN 31.73						
WTR YR 1972	TOTAL 6,909.30	MEAN 18.9	MAX 220	MIN .67	CFSM 2.96	IN 40.29						

PEAK DISCHARGE (BASE, 230 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2115	5.53	471				
5-3	2200	5.24	413				
6-30	1745	4.65	301				

NOTE.--No gage-height record July 13 to Aug. 9, Aug. 11-31.

CONNECTICUT RIVER BASIN

01168500 Deerfield River at Charlemont, Mass.

LOCATION.--Lat 42°37'33", long 72°51'20", Franklin County, on left bank 1 mile downstream from Charlemont, 2.5 miles downstream from Chickley River, and at mile 24.5.

DRAINAGE AREA.--362 sq mi.

PERIOD OF RECORD.--June 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 517.36 ft above mean sea level.

AVERAGE DISCHARGE.--59 years, 880 cfs (33.01 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 8,770 cfs May 4 (gage height, 7.74 ft); minimum daily, 72 cfs Sept. 4, 24.
Period of record: Maximum discharge, 56,300 cfs Sept. 21, 1938 (gage height, 20.17 ft, from floodmarks), from rating curve extended above 31,000 cfs on basis of slope-area and contracted-opening measurements at gage heights 17.75 and 20.17 ft; minimum daily, 5 cfs June 17, 1921.

REMARKS.--Records good. Flow regulated by Somerset Reservoir, since 1924 by Harriman Reservoir (see p. 207), and by several powerplants above station.

REVISIONS (WATER YEARS).--WSP 781: 1915(M). WSP 1301: 1918(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	463	724	1,080	1,070	972	1,030	936	2,790	3,320	3,180	435	752
2	208	1,160	1,030	872	925	1,040	943	3,780	2,320	2,540	358	360
3	78	782	1,020	1,010	840	1,450	1,540	4,260	1,780	3,030	402	95
4	793	973	981	1,090	1,150	1,350	1,420	6,740	815	2,680	347	72
5	794	987	453	1,110	1,120	1,240	839	4,760	1,260	1,910	170	366
6	807	271	270	1,100	1,090	1,130	896	3,500	1,230	1,810	93	536
7	726	373	987	1,100	1,080	1,100	883	3,210	1,720	1,700	420	491
8	855	919	1,430	661	1,070	1,120	834	3,200	1,320	722	868	506
9	325	896	1,240	509	1,060	1,100	648	4,220	2,070	505	824	471
10	804	864	1,190	972	1,060	1,130	1,030	3,370	1,810	546	846	105
11	1,030	907	1,370	1,290	1,040	1,140	1,050	2,930	1,750	612	629	400
12	760	893	1,300	1,270	936	1,130	950	2,930	1,750	612	629	400
13	1,120	303	1,000	1,240	559	1,120	1,370	2,610	1,290	689	248	487
14	705	222	1,160	1,520	1,020	780	1,900	2,310	1,150	534	74	497
15	935	742	1,210	1,290	1,080	957	2,200	2,290	1,170	580	437	623
16	367	408	1,370	902	1,180	799	1,970	3,080	1,020	232	687	361
17	237	787	1,830	1,130	1,140	1,100	4,090	3,450	551	522	697	103
18	710	708	1,450	1,160	1,120	1,340	3,990	4,950	400	477	718	343
19	1,000	781	921	1,180	1,130	686	4,970	3,270	504	432	551	408
20	206	582	641	1,140	1,120	988	7,050	2,990	1,140	626	149	579
21	572	293	1,190	1,130	1,100	1,110	3,920	2,860	1,120	411	318	398
22	844	522	1,170	1,100	1,100	1,520	2,830	2,480	1,450	349	448	694
23	946	772	1,010	562	1,090	1,980	3,110	1,830	2,220	242	504	130
24	303	670	1,120	839	1,100	2,300	3,030	1,680	3,660	503	667	72
25	553	492	1,170	1,230	1,080	2,150	3,050	1,850	2,400	583	509	179
26	802	247	512	1,160	1,090	2,040	2,960	1,390	3,650	644	289	111
27	1,030	445	926	1,120	1,080	1,660	2,560	1,170	2,160	474	83	206
28	858	388	1,220	1,120	837	1,650	2,280	457	1,770	696	495	573
29	910	406	1,250	874	1,070	1,650	1,960	260	1,650	265	795	817
30	243	991	1,200	509	-----	1,350	2,060	671	3,060	183	805	313
31	110	-----	1,170	767	-----	1,630	-----	1,290	-----	332	755	-----
TOTAL	20,331	10,701	33,831	31,746	30,459	40,670	67,260	85,628	50,590	28,365	15,331	11,693
MEAN	659	657	1,093	1,024	1,050	1,312	2,242	2,762	1,686	915	495	390
MAX	1,170	1,160	1,830	1,490	1,190	2,300	7,050	4,740	3,660	1,180	868	817
MIN	76	222	270	509	840	648	648	290	400	103	74	72
MEAN†	344	405	1,245	837	439	1,064	3,373	3,324	1,782	804	115	110
CPSM†	.95	1.12	3.44	2.31	1.21	2.94	9.32	9.18	4.92	2.22	.32	.30
IN.†	1.10	1.25	3.97	2.67	1.31	3.39	10.40	10.89	5.49	2.36	.37	.34

CAL YR 1971 TOTAL 305,444 MEAN 937 MAX 4,970 MIN 77 MEAN† 887 CPSM† 2.37 IN† 32.16
WTR YR 1972 TOTAL 494,674 MEAN 1,060 MAX 7,050 MIN 72 MEAN† 1,135 CPSM† 3.19 IN† 43.42

† Adjusted for change in contents in Somerset and Harriman Reservoirs.

CONNECTICUT RIVER BASIN

177

01169000 North River at Shattuckville, Mass.

LOCATION.--Lat 42°38'18", long 72°43'32", Franklin County, on right bank in Shattuckville, 1.2 miles south of Griswoldville and 1.3 miles upstream from mouth.

DRAINAGE AREA.--88.4 sq mi.

PERIOD OF RECORD.--October 1939 to current year. October and November 1939 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 458.36 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 174 cfs (26.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,800 cfs May 3 (gage height, 6.96 ft); minimum, 13 cfs Sept. 12; minimum daily, 15 cfs Sept. 12. Period of record: Maximum discharge, 13,200 cfs Oct. 15, 1955 (gage height, 10.37 ft), from rating curve extended above 5,700 cfs on basis of computation of flow over dam at gage height 9.62 ft; minimum daily, 5.1 cfs Oct. 3, 1948.

REMARKS.--Records good except those for winter period, which are fair. Diurnal fluctuation at times caused by mill above station; because storage capacity is small, daily flows are not affected appreciably. Prior to 1950, greater regulation by mill.

REVISIONS (WATER YEARS).--WSP 1111: 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	39	128	154	110	130	305	834	1,220	774	48	25
2	24	77	84	185	100	241	382	1,210	479	403	46	23
3	24	130	72	245	102	371	342	1,570	318	717	62	23
4	23	82	64	190	185	289	318	2,030	283	786	56	23
5	23	64	60	176	190	222	280	1,070	368	408	43	21
6	24	56	66	120	165	190	259	668	277	331	39	20
7	23	73	257	125	150	185	250	541	493	268	37	18
8	23	87	219	130	130	185	227	602	335	247	50	18
9	21	67	165	130	125	155	227	1,100	507	212	45	18
10	231	60	186	298	120	130	241	657	349	183	48	17
11	251	58	423	268	110	150	259	488	262	171	40	17
12	108	57	345	265	105	138	308	394	216	146	35	15
13	73	56	237	222	100	134	484	332	193	135	34	17
14	58	54	187	378	320	124	873	296	174	137	31	45
15	52	52	193	250	290	128	679	804	159	117	36	40
16	47	79	454	161	240	138	768	691	146	109	32	28
17	46	94	427	135	200	493	2,190	556	142	227	33	23
18	40	79	276	185	160	613	1,810	879	124	123	33	27
19	39	82	175	179	146	378	2,120	618	115	102	34	25
20	37	89	184	155	140	299	2,810	532	121	128	29	28
21	37	78	186	150	130	259	1,380	556	110	108	25	23
22	36	77	150	130	140	720	954	394	117	92	24	21
23	36	65	115	142	140	674	1,440	307	261	132	23	20
24	34	51	199	192	140	469	1,360	268	858	110	22	19
25	64	50	340	227	117	371	1,130	230	625	90	23	19
26	79	64	234	186	117	325	886	201	771	79	23	19
27	59	68	220	150	110	289	708	179	371	67	35	18
28	51	68	236	140	110	253	618	161	262	61	107	17
29	45	68	233	135	110	271	714	144	209	55	55	17
30	42	124	172	125	-----	286	768	130	1,080	52	37	21
31	39	-----	171	120	-----	271	-----	683	-----	50	30	-----
TOTAL	1,715	2,148	6,458	5,588	4,302	8,881	25,090	19,125	10,945	6,620	1,215	665
MEAN	55.3	71.6	208	180	148	286	836	617	365	214	39.2	22.2
MAX	251	130	454	378	320	720	2,810	2,030	1,220	786	107	65
MIN	21	39	60	120	100	124	227	130	110	50	22	15
CFSM	6.38	8.81	2.35	2.04	1.67	3.24	9.46	6.98	4.13	2.42	0.44	0.25
IN.	0.72	0.90	2.72	2.35	1.81	3.74	10.56	8.05	4.61	2.79	0.51	0.28

CAL VR 1971 TOTAL 61,339.1 MEAN 168 MAX 1580 MIN 9.0 CFSM 1.90 IN 25.81
WVR VR 1972 TOTAL 42,752.0 MEAN 253 MAX 1810 MIN 15 CFSM 2.86 IN 39.03

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-17	1930	6.40	3,000	6-30	100	6.51	3,000
6-19	2240	6.91	3,720	7-3	230	9.89	2,230
5-5	2315	6.96	3,800				

CONNECTICUT RIVER BASIN

01169900 South River near Conway, Mass.

LOCATION.--Lat 42°32'31", long 72°41'39", Franklin County, on left bank at upstream side of Reeds Bridge just off Bardwell Road, 2.2 miles north of Conway, and 2.6 miles upstream from mouth. Prior to Oct. 7, 1970, at downstream side of bridge at same site.

DRAINAGE AREA.--24.0 sq mi.

RECORDS AVAILABLE.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 460 ft (from topographic map). Prior to Oct. 7, 1970, at downstream side of bridge at same site and datum.

AVERAGE DISCHARGE.--6 years, 49.8 cfs (28.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,120 cfs June 30 (gage height, 6.77 ft), from rating curve extended above 390 cfs; minimum, 5.3 cfs Sept. 12, 13.

Period of record: Maximum discharge, 3,000 cfs Apr. 23, 1969 (gage height, 7.40 ft), from rating curve extended above 390 cfs; minimum, 3.0 cfs Aug. 21, 22, Sept. 2, 3, 1966.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	15	38	38	28	50	114	98	413	185	17	8.2
2	7.7	64	34	45	27	70	117	139	119	119	15	7.7
3	7.2	44	30	80	26	100	104	130	89	208	15	7.7
4	7.2	32	27	50	55	72	90	261	98	180	16	7.2
5	7.2	24	24	43	45	60	81	153	286	110	13	6.4
6	7.2	22	30	35	40	50	75	114	119	96	12	6.1
7	7.2	32	82	32	37	51	74	96	149	81	13	5.9
8	6.7	28	48	33	35	54	68	107	102	71	28	5.5
9	7.2	23	38	37	35	45	69	201	161	64	17	5.9
10	114	21	43	80	29	44	74	127	151	56	16	5.6
11	51	20	99	68	27	41	78	101	98	52	13	5.6
12	28	20	67	60	26	39	101	88	82	46	12	5.3
13	20	19	55	53	35	38	132	78	72	53	12	6.7
14	18	17	45	85	90	35	198	72	67	55	11	13
15	17	18	51	56	75	45	141	196	62	43	14	10
16	16	25	108	42	60	50	167	180	58	39	12	7.2
17	14	24	88	37	50	180	422	134	57	45	11	6.1
18	13	21	62	50	40	150	308	265	51	37	10	6.1
19	13	21	48	47	35	110	343	130	51	33	9.2	12
20	13	21	49	43	40	81	505	169	61	35	8.2	14
21	13	20	39	39	36	74	265	171	52	33	7.7	8.2
22	13	21	35	36	38	230	196	116	67	30	6.7	8.2
23	12	18	30	38	34	239	335	96	124	27	6.4	6.7
24	13	21	66	41	37	130	236	83	286	26	7.2	6.4
25	32	22	79	60	33	101	185	74	201	23	12	6.4
26	27	57	60	48	32	90	153	66	178	24	8.7	6.4
27	20	38	55	38	31	82	132	61	107	20	9.2	6.4
28	18	26	60	34	31	82	117	54	81	18	53	6.1
29	15	26	54	32	30	105	113	48	71	17	15	5.9
30	14	56	45	30	-----	96	104	45	537	17	11	8.7
31	15	-----	42	29	-----	81	-----	296	-----	17	8.7	-----
TOTAL	575.3	816	1,631	1,439	1,137	2,675	5,097	3,949	4,050	1,860	420.0	222.0
MEAN	18.6	27.2	52.6	46.4	36.7	86.3	170	127	135	60.0	13.5	7.60
MAX	114	64	108	85	90	239	505	296	537	208	93	14
MIN	6.7	14	24	29	26	35	68	45	51	17	6.4	5.3
CFSM	7.78	1.13	2.19	1.93	1.67	3.60	7.08	5.29	5.63	2.90	0.96	0.31
IN.	0.89	1.26	2.53	2.23	1.76	4.19	7.98	6.12	6.28	2.88	0.85	0.34

CAL YR 1971 TOTAL 15,828.9 PEAK 41.4 MAX 385 MIN 3.6 CFSM 1.81 IN 24.93
WTR YR 1972 TOTAL 23,871.3 MEAN 65.2 MAX 537 MIN 5.3 CFSM 2.72 IN 37.00

PEAK DISCHARGE (BASE, 660 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-20	1615	5.87	939	6-9	0645	5.29	740
9-18	0015	5.30	735	6-30	1445	6.77	2,120
9-31	1615	6.14	1,440	7-8	2145	9.26	719

CONNECTICUT RIVER BASIN

179

01170000 Deerfield River near West Deerfield, Mass.

LOCATION.--Lat 42°32'09" N, long 72°39'14" W, Franklin County, on right bank 0.4 mile downstream from South River, 1.2 miles west of West Deerfield, 2.5 miles west of Deerfield, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--558 sq mi.

PERIOD OF RECORD.--March to November 1904, January 1905, March to December 1905, October 1940 to current year. Published as "at Deerfield" 1904-5.

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (from topographic map). Prior to Dec. 16, 1905, nonrecording gage at site 1.5 miles downstream at different datum.

AVERAGE DISCHARGE.--32 years (1940-72), 1,237 cfs (30.10 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 13,800 cfs Apr. 20 (gage height, 7.90 ft); minimum daily, 81 cfs Oct. 21.
Period of record: Maximum discharge, 48,500 cfs Dec. 31, 1948 (gage height, 15.43 ft); minimum daily, 28 cfs July 29, 1962.

REMARKS.--Records good. Flow regulated since 1913 by Somerset Reservoir, since 1924 by Harriman Reservoir (see p. 207), and by several powerplants above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861	373	1,410	1,300	1,280	1,290	1,950	3,610	5,160	4,590	526	848
2	907	1,380	1,240	1,260	1,170	1,540	1,640	4,920	3,490	3,450	425	553
3	102	1,320	1,240	1,490	559	2,090	2,090	5,100	2,630	3,170	577	149
4	724	578	891	1,560	1,770	1,930	2,200	9,210	1,610	4,240	387	162
5	909	1,160	436	1,440	1,460	1,740	1,430	6,420	2,030	2,960	414	303
6	836	719	752	1,300	1,400	1,300	1,440	4,440	1,850	2,580	137	572
7	789	429	1,740	1,350	1,330	1,500	1,420	3,890	2,600	2,330	295	617
8	864	826	1,780	987	1,340	1,500	1,310	3,900	2,090	1,680	995	494
9	634	1,170	1,500	789	1,280	1,470	1,730	5,640	2,940	1,040	1,050	556
10	1,060	1,000	1,600	1,500	1,350	1,340	1,720	4,380	2,610	807	881	215
11	1,720	1,060	2,120	1,870	1,190	1,470	1,620	3,630	2,460	972	783	368
12	472	1,040	1,840	1,740	1,190	1,400	1,600	3,190	1,780	1,030	460	574
13	1,240	561	1,490	1,690	1,030	1,350	2,240	2,810	1,550	931	145	680
14	1,140	403	1,500	2,100	1,540	1,150	3,740	2,660	1,590	906	329	706
15	1,090	586	1,540	1,690	1,730	1,090	3,410	3,410	1,540	664	735	785
16	660	910	2,400	1,220	1,630	1,140	2,990	4,240	1,270	503	778	468
17	740	391	2,390	1,470	1,510	2,070	4,350	3,720	1,110	693	840	204
18	677	470	1,940	1,410	1,180	2,920	4,550	6,380	793	694	851	301
19	1,160	842	1,010	1,490	1,410	1,610	7,330	4,340	693	687	688	334
20	313	919	1,710	1,480	1,340	1,440	11,800	3,480	1,480	896	284	383
21	81	486	1,470	1,450	1,240	1,570	4,400	3,910	1,470	633	211	512
22	661	674	1,440	1,350	1,420	2,590	4,400	3,130	1,600	491	478	762
23	1,710	945	1,750	901	1,370	3,010	5,270	2,440	2,440	611	621	278
24	825	820	1,590	1,740	1,400	1,110	4,810	2,140	4,940	489	702	89
25	449	639	1,670	1,590	1,600	1,820	4,940	2,040	3,160	810	967	230
26	491	419	981	1,520	1,140	2,430	4,770	1,930	4,610	889	439	190
27	1,143	637	1,640	1,470	1,190	2,740	1,670	1,740	3,230	854	140	190
28	766	617	1,710	1,170	1,170	2,130	3,700	882	2,360	954	1,090	537
29	1,740	977	1,710	907	1,100	2,190	3,480	659	2,110	965	999	934
30	797	1,520	1,650	1,650	1,650	1,650	3,030	825	1,000	387	940	904
31	726	-----	1,650	1,090	-----	1,110	-----	2,390	-----	160	845	-----
TOTAL	26,106	74,019	46,540	42,670	36,744	58,920	134,990	111,427	70,774	41,319	19,492	19,896
AVERAGE	842	2387	1,469	1,376	1,185	1,868	4,354	3,594	2,283	1,333	616	626
MAX	1,740	1,380	2,120	2,100	1,770	2,590	11,800	9,210	5,160	4,590	1,050	848
MIN	81	373	436	789	559	1,090	1,290	640	1,850	807	145	162
MEAN†	490	579	1,659	1,190	743	1,039	4,860	4,156	2,438	1,222	217	184
CFSMT	8.88	1.04	2.97	2.18	1.38	2.94	8.35	7.45	4.37	2.19	.39	.33
INCH	1.01	1.16	3.42	2.46	1.44	3.39	9.32	8.99	4.68	2.93	.45	.37

CAL Y=1971 TOTAL 470,061 MEAN 1,461 MAX 2,120 MIN 81 MEAN† 1,171 CFSMT 2.10 INCH 26.51
 WTR Y=1972 TOTAL 488,730 MEAN 1,534 MAX 2,100 MIN 81 MEAN† 1,598 CFSMT 2.66 INCH 39.00

† Adjusted for change in contents in Somerset and Harriman Reservoir.

CONNECTICUT RIVER BASIN

01170100 Green River near Colrain, Mass.

LOCATION.--Lat 42°42'12", long 72°40'16", Franklin County, on right bank 0.5 mile upstream from bridge on West Layden Road and 2.5 miles northeast of Colrain.

DRAINAGE AREA.--41.4 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 90.6 cfs (29.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,570 cfs May 3 (gage height, 5.62 ft), from rating curve extended above 890 cfs; minimum, 7.3 cfs Sept. 12, 13, 28-30.

Period of record: Maximum discharge, 3,200 cfs Apr. 23, 1969 (gage height, 7.20 ft), from rating curve extended above 890 cfs; minimum, 1.9 cfs Aug. 1, 1968.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS.--WRD Mass., N.H., R.I., Vt., 1971: 1968(M), 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	50	57	48	55	130	483	506	332	23	12
2	10	29	42	61	43	100	160	586	219	168	21	11
3	9.8	47	36	120	37	160	145	698	146	236	30	11
4	10	32	31	90	92	140	130	819	121	290	26	11
5	10	26	28	68	88	90	117	513	168	173	21	10
6	9.4	23	35	92	70	78	108	347	121	134	19	9.0
7	9.4	29	115	93	62	80	104	279	181	104	19	8.6
8	9.4	34	115	56	56	74	93	304	128	98	24	8.6
9	9.0	25	75	59	52	57	97	535	176	90	22	8.6
10	115	25	69	120	43	65	102	354	128	75	22	7.9
11	98	24	165	106	40	61	108	246	97	68	19	7.6
12	39	23	137	108	37	58	123	284	83	59	16	7.6
13	28	23	86	90	38	56	204	173	75	55	16	9.0
14	24	21	68	140	140	53	356	151	68	57	16	17
15	22	21	75	110	120	58	290	385	63	49	19	15
16	20	24	184	70	100	64	323	315	89	47	16	12
17	18	31	168	58	85	228	782	229	57	83	17	11
18	16	29	106	80	70	260	675	307	50	53	17	10
19	16	28	64	74	65	160	815	239	46	44	17	11
20	15	32	80	68	75	130	1,040	319	47	75	15	12
21	15	29	79	42	60	110	587	232	45	97	13	9.8
22	15	29	59	58	66	310	686	173	46	46	12	9.8
23	15	26	45	58	56	280	630	137	115	63	11	9.0
24	15	27	50	56	56	280	639	115	545	48	11	8.2
25	27	28	119	89	91	160	560	97	239	42	11	8.2
26	34	52	97	72	50	140	450	85	302	56	11	8.2
27	25	42	88	66	52	120	382	76	155	32	19	8.2
28	22	34	93	61	50	110	339	68	184	30	47	7.4
29	20	34	86	87	50	115	399	61	82	27	23	7.3
30	19	55	65	55	-----	120	437	56	376	25	16	11
31	19	-----	60	52	-----	115	-----	290	-----	23	14	-----
TOTAL	725.0	904	3,575	2,337	1,852	3,006	10,001	8,776	6,340	2,700	982	298.2
MEAN	23.4	28.1	83.1	75.4	61.3	123	360	283	145	87.7	30.8	9.36
Q10	115	55	184	140	140	550	1,040	819	506	332	47	17
Q50	4.0	17	28	92	87	58	95	56	45	23	11	7.3
Q100	9.7	73	2,011	1,882	1,594	2,497	8,776	4,894	3,900	2,112	605	186
Q1000	9.8	91	2,331	2,337	1,856	3,002	9,771	7,880	5,911	2,744	532	229

Q10, 1971 TOTAL 27,962.3 Q1000 76.9 MEAN 28.1 Q10 4.5 Q100 9.7 Q1000 1,040 Q10 23.4 Q100 30.8 Q1000 1,040

PEAK DISCHARGE (BASED ON Q10)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	1215	5.40	1,400				
5-3	2100	5.62	1,570				
5-5	1745	6.00	1,500				

CONNECTICUT RIVER BASIN

181

01170500 Connecticut River at Montague City, Mass.

LOCATION.--Lat 42°34'48", long 72°34'30", Franklin County, on left bank 75 ft downstream from Penn Central Railroad bridge at Montague City, 1,000 ft downstream from Deerfield River, and at mile 119.0.

DRAINAGE AREA.--7,865 sq mi.

PERIOD OF RECORD.--March 1904 to current year. Prior to October 1929, published as "at Sunderland." Records published for both sites October 1929 to September 1932.

GAGE.--Water-stage recorder. Datum of gage is 99.87 ft above mean sea level. Prior to Oct. 1, 1917, nonrecording gage; Oct. 1, 1917, to Oct. 8, 1921, water-stage recorder used for low stages, nonrecording gage otherwise; and Oct. 9, 1921, to Sept. 30, 1932, water-stage recorder, at site 9 miles downstream at datum 1.00 ft lower. Since Oct. 1, 1929, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--68 years, 13,490 cfs (23.29 inches per year), adjusted for storage since October 1923.

EXTREMES.--Current year: Maximum discharge, 87,900 cfs May 5 (gage height, 29.69 ft); minimum daily, 501 cfs Oct. 3.
Period of record: Maximum discharge, 236,000 cfs Mar. 19, 1936 (gage height, 49.2 ft, from floodmarks); minimum daily, 215 cfs Aug. 31, Sept. 1, 1958.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 207), and other reservoirs (combined usable capacity, about 42.2 billion cubic feet).

REVISIONS (WATER YEARS).--WSP 471: 1904-17. WSP 741: 1930-32. WSP 781: 1928(M). WSP 891: Drainage area. WSP 1051: 1905, 1909-10, 1912-14, 1920, 1922-23, 1925-26, 1928, drainage area at Sunderland. WSP 1301: 1905(M), 1914-19(M), 1930-31(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,310	5,390	8,180	4,890	9,200	9,000	22,600	49,600	24,100	23,400	8,730	6,380
2	2,690	6,880	6,400	7,060	8,600	10,700	25,600	58,300	25,300	14,000	8,320	4,770
3	501	6,800	6,230	10,200	9,000	14,500	25,600	66,800	24,400	14,900	6,990	2,540
4	4,410	6,010	4,620	10,700	9,600	17,100	25,200	80,500	20,700	20,600	8,400	902
5	5,250	6,520	3,840	11,300	9,400	16,200	23,200	85,400	23,000	17,000	8,840	2,980
6	5,960	2,730	6,050	9,380	4,500	14,900	22,300	83,500	18,100	16,400	5,880	4,490
7	5,560	3,340	7,430	8,730	9,000	13,100	21,000	81,200	17,300	15,900	7,580	2,910
8	5,780	6,420	9,650	6,720	10,000	11,800	20,100	80,500	18,000	11,200	7,150	4,270
9	3,770	7,470	9,170	6,160	9,000	11,700	17,500	80,100	18,100	7,600	7,170	2,970
10	3,820	6,400	9,500	8,730	10,000	13,500	15,700	76,500	17,600	9,100	6,480	1,460
11	11,100	7,470	13,400	12,300	10,000	11,400	15,200	68,800	19,800	8,980	9,180	2,380
12	10,600	6,800	11,000	10,200	8,000	8,570	19,100	58,200	17,600	19,400	6,440	3,480
13	8,360	3,010	15,200	11,100	5,400	9,580	23,400	47,600	16,200	14,600	3,110	3,680
14	8,000	883	14,000	10,300	11,000	8,850	31,800	42,300	14,600	13,900	5,650	5,220
15	6,800	4,220	11,000	11,500	11,000	9,480	32,600	33,100	14,100	10,900	6,640	5,260
16	3,950	4,690	11,900	11,200	10,500	10,900	29,700	41,200	14,100	4,680	5,550	2,850
17	639	4,550	17,300	12,700	9,500	13,600	43,100	46,200	13,100	8,590	5,880	1,460
18	5,010	5,190	15,500	11,500	10,000	19,800	54,500	54,100	10,500	11,700	6,800	3,370
19	5,560	5,880	10,800	13,100	9,600	24,900	64,200	48,300	10,300	10,500	4,000	4,550
20	6,340	5,260	10,800	13,700	8,000	26,300	77,500	40,400	14,000	10,600	2,630	4,220
21	4,140	2,420	11,200	13,000	7,200	23,700	73,300	37,200	13,300	9,060	5,010	2,610
22	4,780	7,600	10,300	10,400	7,400	25,000	62,800	34,200	12,100	10,500	6,120	3,870
23	4,800	7,810	8,870	8,270	8,400	37,100	62,100	28,500	9,100	12,500	4,480	2,140
24	4,020	4,900	7,490	7,600	7,300	37,400	61,800	19,800	17,800	15,100	4,240	1,730
25	5,250	3,520	10,700	10,000	8,600	34,000	62,900	18,100	17,600	19,900	6,230	3,460
26	7,580	2,880	9,580	11,000	9,300	30,200	61,300	16,200	20,600	17,500	4,410	2,700
27	7,390	3,850	10,900	9,600	6,200	26,000	55,700	15,800	22,000	15,500	2,060	3,550
28	7,580	3,290	12,400	10,000	8,000	24,100	47,300	9,900	18,300	12,300	9,390	3,580
29	7,930	6,030	12,800	9,200	7,900	21,900	42,500	8,410	13,800	11,700	10,000	2,920
30	2,810	8,360	14,800	6,500	-----	22,800	44,800	9,880	15,600	9,370	7,930	4,030
31	555	-----	10,800	8,000	-----	23,300	-----	12,600	-----	9,376	6,060	-----
TOTAL	165,245	156,663	321,810	305,340	251,500	581,380	1,184,441	1,433,008	511,500	406,750	197,350	100,732
MEAN	5,330	5,222	10,380	9,850	8,672	18,750	39,480	46,230	17,050	13,120	6,366	3,358
MAX	11,100	8,360	17,300	13,700	11,000	37,400	77,500	85,400	25,300	23,400	10,000	6,380
MIN	501	883	3,840	4,990	4,500	8,570	15,200	8,410	9,100	4,680	2,060	902
MEAN†	4,574	4,627	10,040	9,240	7,278	17,470	41,080	50,410	17,200	13,130	5,437	2,507
CFSMT	.58	.59	1.28	1.17	.93	2.22	5.22	6.41	2.19	1.67	.69	.32
IN.†	.67	.66	1.47	1.35	1.00	2.56	5.83	7.39	2.44	1.93	.80	.36

CAL YR 1971 TOTAL 4,255,528 MEAN 11,660 MAX 74,400 MIN 305 MEAN† 11,660 CFSMT 1.48 INT 20.12
WTR YR 1972 TOTAL 5,615,660 MEAN 15,340 MAX 85,400 MIN 501 MEAN† 15,280 CFSMT 1.94 INT 26.45

PEAK DISCHARGE (BASE, 61,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1930	29.01	84,300				
5-5	2315	29.69	87,900				

M Expressed in thousands.

† Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to 2 reservoirs in Deerfield River basin listed on page 207.

CONNECTICUT RIVER BASIN

01171300 Fort River near Amherst, Mass.

LOCATION.--Lat 42°21'28", long 72°30'17", Hampshire County, on left bank 20 ft upstream from Southeast Street Bridge, 250 ft downstream from Hop Brook, and 1.3 miles southeast of Amherst.

DRAINAGE AREA.--40.6 sq mi, excludes 1.04 sq mi drained by Nourse Brook, flow of which is diverted from basin.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 147 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 60.5 cfs (20.24 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 1,040 cfs Mar. 23 (gage height, 6.81 ft); minimum, 9.7 cfs Oct. 10.

Period of record: Maximum discharge, 2,030 cfs Apr. 2, 1970 (gage height, 8.70 ft), from rating curve extended above 690 cfs; minimum, 1.9 cfs Sept. 3, 1966.

Floods of March 1936 and September 1938 reached discharges of 2,360 cfs and 1,640 cfs, respectively, by computation of flow over dam 1.2 miles downstream.

REMARKS.--Records good. Diversion above station for municipal supply of Amherst.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	137	50	29	51	119	74	551	316	27	13
2	11	27	74	51	29	105	137	75	302	161	25	13
3	11	38	55	100	29	232	133	94	144	148	24	13
4	11	30	46	75	90	212	119	215	102	185	25	13
5	12	23	40	68	62	142	113	185	159	133	22	12
6	12	20	30	51	45	100	113	125	115	111	19	12
7	11	32	105	45	41	92	111	98	98	89	19	12
8	11	36	125	42	34	127	102	103	85	75	28	11
9	10	26	103	36	30	120	98	198	129	96	25	12
10	59	22	105	85	28	96	102	161	394	92	26	13
11	125	20	191	96	26	71	103	119	223	66	20	12
12	78	20	178	98	25	68	105	98	131	54	18	11
13	32	19	113	96	47	78	164	89	100	68	19	12
14	22	17	82	185	109	78	260	78	85	102	17	19
15	19	19	87	119	82	59	163	170	78	75	30	20
16	17	26	142	57	77	57	150	212	72	55	26	15
17	15	29	135	42	52	422	223	150	77	46	22	14
18	15	25	96	44	45	793	180	129	68	39	20	14
19	12	22	68	51	34	361	142	103	57	35	20	18
20	12	21	57	52	39	221	204	96	111	33	18	19
21	12	21	54	51	35	166	251	111	98	32	17	16
22	12	25	50	47	39	349	161	89	71	30	16	15
23	12	27	43	46	34	684	277	66	66	28	15	14
24	13	21	57	50	36	330	212	57	135	27	14	12
25	23	20	94	85	36	204	154	51	133	34	14	12
26	29	22	75	69	36	159	123	45	150	50	15	11
27	21	23	72	42	35	137	105	43	117	43	16	12
28	17	39	74	35	36	119	94	40	119	29	19	11
29	15	54	71	36	38	127	85	38	344	25	17	10
30	14	198	60	36	-----	139	78	35	237	22	15	14
31	14	-----	53	34	-----	123	-----	63	-----	21	14	-----
TOTAL	688	934	2,672	1,974	1,278	6,022	4,401	3,210	4,551	2,320	622	405
MEAN	22.2	31.1	86.2	63.7	44.1	194	147	104	152	74.8	20.1	13.5
MAX	125	198	191	185	109	793	277	215	551	316	30	20
MIN	10	12	30	34	25	51	78	35	57	21	14	10
MEAN†	23.0	32.0	87.2	64.7	45.2	195	148	104	152	75.2	20.4	14.4
CFSM†	.57	.79	2.15	1.59	1.11	4.80	3.65	2.56	3.74	1.85	.50	.35
IN.†	.65	.88	2.48	1.84	1.20	5.54	4.06	2.96	4.18	2.14	.58	.40

CAL YR 1971 TOTAL 17,180.6 MEAN 47.1 MAX 278 MIN 5.3 MEAN† 48.5 CFSM† 1.19 INT 16.23
WTR YR 1972 TOTAL 29,077.0 MEAN 79.4 MAX 793 MIN 10 MEAN† 80.2 CFSM† 1.98 INT 26.90

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	0100	6.72	1,010	6-1	1200	6.23	821
3-23	0100	6.81	1,040	6-29	0145	5.84	684

† Adjusted for diversion for municipal supply of Amherst. Diversion records furnished by town of Amherst.

CONNECTICUT RIVER BASIN

183

01171500 Mill River at Northampton, Mass.

LOCATION.--Lat 42°19'05", long 72°39'21", Hampshire County, on right bank at Northampton, 3.5 miles upstream from mouth.

DRAINAGE AREA.--52.8 sq mi.

PERIOD OF RECORD.--October 1938 to current year. October 1938 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 140 ft (from topographic map).

AVERAGE DISCHARGE.--34 years, 92.0 cfs (23.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,810 cfs June 30 (gage height, 5.82 ft); minimum, 9.9 cfs Sept. 10, 11.
Period of record: Maximum discharge, 6,300 cfs Aug. 19, 1955 (gage height, 11.78 ft), from rating curve extended above 3,700 cfs on basis of computation of peak flow over dam; minimum, 2.2 cfs Oct. 1, 1950; minimum daily, 4.2 cfs Aug. 21, 23, 24, 1957.

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated by mill above station prior to 1956.

REVISIONS (WATER YEARS).--WSP 921: 1940. WSP 1231: 1940-42(M), 1944-45(M), 1948(M), 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	139	74	64	72	206	159	792	549	36	18
2	15	69	87	106	59	144	269	173	283	286	33	15
3	13	94	73	170	59	250	241	225	190	254	32	14
4	14	60	68	106	221	206	204	370	154	323	35	14
5	16	45	50	94	140	142	144	308	181	203	30	13
6	15	35	55	66	105	121	161	203	149	147	25	12
7	15	55	170	78	90	112	161	170	171	144	27	12
8	14	58	154	79	80	123	172	174	137	132	40	12
9	13	45	112	83	72	110	154	349	204	123	37	12
10	154	41	121	173	66	96	162	297	339	110	32	10
11	176	34	228	139	54	92	165	225	181	104	27	11
12	69	38	190	132	54	92	176	190	134	96	23	11
13	46	34	139	119	60	94	231	162	119	100	22	12
14	37	32	121	199	265	94	355	152	112	149	24	19
15	45	35	137	130	193	94	319	416	100	100	36	17
16	38	55	221	81	154	100	265	472	96	83	30	15
17	31	54	216	65	115	495	458	283	96	79	27	13
18	29	44	149	105	94	612	455	425	83	72	29	13
19	26	40	108	106	74	339	410	258	90	61	26	16
20	26	40	110	87	85	231	585	255	152	57	22	15
21	25	37	106	85	53	199	526	293	106	56	19	15
22	24	41	94	74	90	508	343	206	119	52	17	14
23	23	46	70	74	73	710	455	170	187	44	16	12
24	22	34	112	88	86	370	343	147	526	43	16	11
25	54	35	165	130	71	264	301	127	308	54	20	12
26	54	46	112	106	71	228	251	108	420	76	19	12
27	49	45	112	76	73	199	218	102	231	48	18	12
28	33	64	123	71	73	184	193	92	170	41	41	12
29	31	74	123	71	74	144	174	81	134	37	36	12
30	27	251	102	70	-----	235	165	74	765	32	26	16
31	25	-----	94	65	-----	193	-----	206	-----	32	21	-----
TOTAL	1,175	1,614	3,863	3,140	2,792	6,945	6,421	6,867	6,736	3,741	842	402
MEAN	37.4	53.8	125	101	96.3	224	201	222	225	121	27.2	13.4
MAX	176	251	228	199	265	710	585	472	742	549	41	19
MIN	13	26	50	65	54	92	154	74	83	32	16	10
CFS-1	72	1,062	2,377	1,441	1,822	4,224	5,332	4,220	4,220	2,229	52	25
14.	83	1,114	2,727	2,221	1,977	4,844	5,443	4,844	4,844	2,644	59	28
CAL YR 1971	TOTAL	31,764.1	MEAN	87.0	MAX	506	MIN	6.6	CFS-1	1,65	IN	22.34
WTR YR 1972	TOTAL	46,538.0	MEAN	127	MAX	742	MIN	10	CFS-1	2,41	IN	32.74

PEAK DISCHARGE (BASE, 1,250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-1	0845	5.13	1,370				
6-30	1945	5.82	1,810				

CONNECTICUT RIVER BASIN

01171800 Bassett Brook near Northampton, Mass.

LOCATION.--Lat 42°18'09", long 72°41'16", Hampshire County, on right bank 20 ft upstream from bridge on State Highway 66 and 3 miles southwest of Northampton.

DRAINAGE AREA.--5.56 sq mi.

PERIOD OF RECORD.--November 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 210 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 7.10 cfs (17.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 98 cfs June 30 (gage height, 6.71 ft), from rating curve extended above 55 cfs; minimum, 1.2 cfs Oct. 1-10.

Period of record: Maximum discharge, 98 cfs June 30, 1972 (gage height, 6.71 ft), from rating curve extended above 55 cfs; minimum, 0.16 cfs Sept. 2, 1963.

REMARKS.--Records good except those for winter period, which are fair. Recording rain gage located at station since April 1963 (no winter records).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.2	1.8	8.6	6.4	9.3	21	10	49	4.5	4.5	1.9
2	1.2	13	13	11	6.2	12	25	12	27	24	3.9	1.9
3	1.2	9.8	8.1	14	6.2	21	23	16	17	27	4.3	2.1
4	1.2	0.2	7.8	10	24	20	20	23	14	24	4.4	2.3
5	1.3	4.4	7.2	8.9	18	14	19	20	14	19	3.5	2.1
6	1.2	3.0	6.3	7.5	14	12	19	15	12	18	3.3	2.0
7	1.2	5.1	12	7.2	11	11	18	13	12	15	3.7	1.9
8	1.2	3.7	14	7.0	9.0	12	17	15	11	13	4.2	1.8
9	1.2	3.6	12	9.0	7.5	11	16	29	15	12	3.5	1.8
10	1.8	3.7	13	15	6.8	9.5	15	21	27	12	3.2	1.8
11	19	4.4	26	12	6.2	8.6	15	16	16	11	2.9	1.8
12	5.6	5.2	19	11	5.6	9.9	15	14	11	9.4	3.0	1.9
13	3.3	7.4	14	10	10	11	20	13	9.5	12	2.9	2.4
14	2.3	5.5	12	14	30	11	27	12	8.6	15	4.6	2.4
15	2.6	5.9	17	9.8	22	14	22	31	15	11	5.0	2.0
16	2.0	4.9	21	8.1	15	11	19	35	13	8.0	3.4	1.9
17	1.9	7.1	18	7.5	11	49	29	24	8.1	7.1	3.2	1.9
18	2.7	6.2	14	8.0	9.0	59	24	21	8.1	5.5	3.0	1.8
19	1.8	3.4	11	8.7	8.2	41	20	18	8.8	5.5	2.9	2.6
20	1.5	1.9	9.5	8.0	8.7	30	29	18	20	5.4	2.8	2.4
21	1.7	2.0	9.7	7.5	8.5	24	32	21	9.7	5.7	2.6	2.1
22	1.6	4.3	8.9	7.2	8.3	43	23	16	9.1	5.8	2.4	2.1
23	1.5	7.2	7.5	7.2	8.1	56	32	13	12	5.1	2.3	1.8
24	1.7	5.8	11	7.6	8.0	39	27	11	29	4.9	2.2	1.8
25	7.1	5.8	19	12	7.4	29	19	10	23	9.7	3.8	1.8
26	5.5	4.5	10	10	7.4	25	16	10	27	10	3.1	1.8
27	3.4	3.8	10	8.0	7.4	22	14	4.3	17	6.3	2.7	1.7
28	2.5	9.5	14	6.8	7.5	21	13	8.3	13	4.7	3.2	1.6
29	2.1	15	14	6.4	7.5	23	13	5.4	11	3.8	2.4	1.8
30	5.5	32	11	6.4	-----	25	14	7.4	48	3.5	2.1	3.1
31	6.9	-----	10	6.4	-----	21	-----	16	-----	3.7	2.1	-----
TOTAL	110.7	200.5	303.0	280.8	305.0	704.3	616	507.4	514.7	365.6	101.1	60.3
MEAN	3.57	6.68	12.4	9.06	10.5	22.7	20.5	16.4	17.2	11.8	3.26	2.01
MAX	19	32	21	15	30	59	32	35	49	43	5.0	3.1
MIN	1.2	1.9	6.3	6.4	5.6	8.6	13	7.4	8.1	3.6	2.1	1.6
CFSY	6.4	1.20	2.23	1.63	1.89	4.08	3.59	2.95	3.09	2.12	.59	.36
IN.	.74	1.34	2.56	1.88	2.04	4.71	4.12	3.39	3.44	2.45	.88	.49

CAL YR 1971 TOTAL 2,851.52 MEAN 7.81 MAX 48 MIN .70 CFSY 1.40 IN 19.08
WTR YR 1972 TOTAL 4,149.40 MEAN 11.3 MAX 59 MIN 1.2 CFSY 2.03 IN 27.76

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-30	1130	6.71	98				

CONNECTICUT RIVER BASIN

185

01172500 Ware River near Barre, Mass.

LOCATION.--Lat 42°25'35", long 72°01'30", Worcester County, on left bank 700 ft downstream from Barre Falls Dam, 1.6 miles upstream from Burnshirt River, 4 miles east of Barre, and at mile 33.3.

DRAINAGE AREA.--55.0 sq mi.

PERIOD OF RECORD.--July 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 745 ft (from topographic map).

AVERAGE DISCHARGE.--26 years, 87.6 cfs (21.63 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 570 cfs Mar. 28 (gage height, 4.67 ft); minimum, 5.8 cfs Oct. 6; minimum daily, 6.1 cfs Oct. 5.
Period of record: Maximum discharge, 1,890 cfs Oct. 16, 1955 (gage height, 6.31 ft), from rating curve extended above 1,100 cfs; minimum, 0.5 cfs Sept. 11, 12, 1963; minimum daily, 0.5 cfs Sept. 11, 1963. Maximum discharge since construction of Barre Falls Reservoir in 1958, 1,050 cfs Apr. 8, 1963 (gage height, 5.41 ft).

REMARKS.--Records good. Prior to August 1955, slight regulation at low flow at times by Long Pond. Flow regulated by Barre Falls Reservoir (see p. 207) since 1958. Diversion at times since 1955 from 6.5 square miles above station for municipal supply of Fitchburg.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	14	127	100	61	70	226	190	275	144	37	10
2	7.1	23	116	97	57	90	245	190	350	144	37	8.7
3	6.4	43	97	120	53	116	262	200	262	124	33	12
4	6.4	45	73	127	85	159	246	140	184	172	32	23
5	6.1	37	61	124	115	262	230	140	167	167	29	21
6	6.4	32	52	115	105	204	214	310	151	144	24	17
7	11	36	92	104	76	259	208	250	144	120	25	14
8	14	43	124	94	77	224	201	225	139	101	30	11
9	12	37	114	85	59	204	183	265	181	103	34	10
10	20	32	114	135	53	105	175	206	261	101	49	8.7
11	45	20	139	175	50	175	178	275	307	85	38	7.7
12	93	24	175	175	44	140	178	234	289	73	20	7.1
13	60	25	169	178	44	150	201	198	208	70	23	7.1
14	51	22	144	190	116	165	292	175	175	92	20	12
15	56	19	129	180	174	135	317	233	156	87	20	21
16	55	21	139	125	205	178	294	346	144	71	19	19
17	51	23	161	125	135	226	419	401	151	61	18	17
18	44	22	156	105	107	414	535	350	142	52	18	15
19	42	22	133	95	79	510	530	282	122	50	21	16
20	24	23	116	90	67	445	500	249	129	74	19	23
21	14	23	103	80	97	377	540	259	120	44	14	19
22	14	30	89	87	100	346	500	255	112	55	14	18
23	14	33	80	83	105	403	467	217	169	55	13	15
24	13	27	94	85	90	404	495	181	108	67	12	13
25	17	23	144	95	85	449	431	154	189	40	12	11
26	20	34	154	105	85	449	357	137	160	73	11	10
27	19	37	131	105	82	485	310	122	159	60	11	9.6
28	14	41	120	77	92	431	249	105	137	45	18	8.7
29	17	48	112	77	80	249	234	94	114	37	17	8.0
30	15	107	99	73	-----	252	214	83	112	33	14	8.7
31	14	-----	101	65	-----	236	-----	95	-----	32	12	-----
TOTAL	467.5	979	3,660	3,498	2,572	8,522	9,475	7,086	5,410	2,618	707	401.3
MEAN	27.2	32.6	118	113	84.7	274	316	229	187	84.5	22.4	13.4
MAX	85	107	175	108	205	510	550	401	397	172	49	23
MIN	6.1	14	52	65	44	70	175	87	112	32	11	7.1
MEAN†	27.2	32.9	110	113	93.5	271	315	228	187	84.3	22.6	13.4
CFSMT	.49	.60	2.15	2.05	1.70	4.93	5.73	4.15	3.40	1.53	.41	.24
IN.†	.57	.67	2.48	2.36	1.83	5.68	6.40	4.78	3.80	1.77	.47	.27
CAL YR 1971	TOTAL 24,246.4	MEAN 71.9	MAX 449	MIN 5.5	MEAN† 72.0	CFSMT 1.31	IN† 17.76					
WTR YR 1972	TOTAL 45,971.2	MEAN 124	MAX 550	MIN 4.1	MEAN† 126	CFSMT 2.29	IN† 31.09					

† Adjusted for change in contents in Barre Falls Reservoir.

CONNECTICUT RIVER BASIN

01173000 Ware River at Coldbrook, Mass.

LOCATION.--Lat 42°23'26", long 72°03'39", Worcester County, on right bank above diversion dam at Ware River intake works at Coldbrook, 2 miles east of South Barre, 2.7 miles downstream from Burnshirt River, and at mile 29.1.

DRAINAGE AREA.--96.8 sq mi.

PERIOD OF RECORD.--January 1928 to current year.

GAGE.--Venturi meters and water-stage recorder. Datum of gage is 5.65 ft below mean sea level. Prior to Feb. 1, 1936, water-stage recorder at site 0.2 mile downstream at datum 631.91 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--44 years, 161 cfs (22.59 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum daily discharge, 984 cfs Apr. 18; minimum daily, 15 cfs Oct. 5.

Period of record: Maximum discharge, 14,000 cfs Sept. 21, 1938 (gage height, 664.28 ft), by computation of flow over dam; minimum daily, 1.1 cfs Sept. 19, 1965 (caused by unusual regulation). Maximum daily discharge since construction of Barre Falls Reservoir in 1958, 1,470 cfs Apr. 1, 1962.

REMARKS.--Records good. Figures of discharge include diversion as needed for Boston metropolitan district during period Oct. 15 to June 14 of each year; diversion began in March 1931. Flow regulated by Barre Falls Reservoir 4.3 miles upstream (see p. 207) since 1958. Diversion at times since 1955 from 6.5 sq mi above station for municipal supply of Fitchburg.

COOPERATION.--Computations of daily discharge made in cooperation with Water Division, Metropolitan District Commission, which collected gage-height and venturi-meter records.

REVISIONS (WATER YEARS).--WSP 781: Drainage area. WSP 1031: 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	33	202	155	105	126	409	327	646	224	72	25
2	15	64	153	124	106	162	454	344	611	211	69	23
3	19	68	139	245	106	286	444	427	433	220	63	35
4	15	53	129	226	145	350	413	676	329	275	61	44
5	15	75	104	196	153	409	333	638	299	248	55	39
6	17	67	101	150	136	419	362	506	255	209	51	32
7	27	61	191	155	132	403	357	414	256	178	45	27
8	29	90	236	139	124	365	329	411	251	160	62	24
9	26	77	207	160	106	346	321	499	434	164	72	22
10	64	69	200	314	102	323	311	500	705	153	84	20
11	151	64	290	327	96	256	316	426	624	140	68	18
12	146	59	306	313	91	262	331	374	439	136	56	17
13	129	46	286	311	102	291	457	324	342	127	49	19
14	90	50	240	375	223	293	581	301	293	138	44	34
15	66	47	226	302	310	240	559	522	259	138	74	42
16	61	54	272	194	320	291	598	626	204	133	39	29
17	76	54	309	167	189	507	925	639	255	108	36	27
18	72	52	257	156	158	868	984	568	233	91	39	30
19	64	51	195	158	133	869	928	452	220	101	43	37
20	47	55	185	145	125	723	970	412	224	131	38	46
21	37	55	177	143	129	605	960	422	231	117	33	41
22	33	68	140	142	144	750	829	387	224	97	30	38
23	31	63	132	139	139	949	902	338	310	104	28	33
24	31	57	199	139	134	846	853	295	253	116	26	25
25	54	45	250	162	133	750	701	257	285	112	26	26
26	48	79	274	140	127	689	579	221	274	125	25	25
27	45	74	234	173	126	699	489	197	252	106	36	24
28	41	84	208	133	125	577	420	177	213	83	40	23
29	38	104	190	125	125	423	355	164	186	70	37	21
30	36	223	148	120	-----	429	347	152	193	63	31	24
31	33	-----	168	113	-----	394	-----	271	-----	63	28	-----
TOTAL	1,033	2,142	6,367	5,931	5,144	14,902	16,077	12,267	9,733	4,343	1,460	870
MEAN	32.6	71.4	205	191	143	481	563	396	324	140	47.1	29.0
MAX	151	223	309	375	320	949	984	676	705	275	84	46
MIN	15	33	101	113	91	126	311	152	186	63	25	17
MEAN†	52.6	71.7	206	191	148	477	562	395	325	140	46.9	29.0
CFSMT	.54	.74	2.13	1.97	1.53	4.93	5.81	4.08	3.36	1.45	.48	.30
IN.†	.63	.83	2.45	2.28	1.65	5.68	6.48	4.71	3.74	1.67	.56	.33
CAL YR 1971	TOTAL 47,020	MEAN 129	MAX 891	MIN 13	MEAN† 129	CFSMT 1.33	INT 18.08					
WTR YR 1972	TOTAL 49,661	MEAN 220	MAX 984	MIN 15	MEAN† 220	CFSMT 2.27	INT 31.00					

† Adjusted for change in contents in Barre Falls Reservoir.

CONNECTICUT RIVER BASIN

187

01173260 Moose Brook near Barre, Mass.

LOCATION.--Lat 42°23'52", long 72°08'51", Worcester County, on right bank 20 ft upstream from culvert on Hardwick Road and 2.7 miles south-west of Barre.

DRAINAGE AREA.--4.54 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-62. October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 6.31 cfs (18.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 97 cfs Mar. 23 (gage height, 2.51 ft); minimum, 0.26 cfs Sept. 11-13, 28-30.

Period of record: Maximum discharge, 135 cfs Mar. 19, 1966 (gage height, 2.75 ft); maximum gage height, 3.65 ft Mar. 7, 1963 (backwater from ice); no flow at times during water years 1963-65, 1968, 1970.

REMARKS.--Records good except those for winter period, which are fair. Records of chemical analyses and water temperature for the water year 1972 are published in Part 2 of this report. Recording rain gage at station since April 1963 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.7	10	7.4	4.3	5.0	16	10	32	6.9	1.1	.37
2	.45	3.4	11	7.4	4.1	7.0	20	10	31	6.1	.98	.37
3	.06	5.2	4.3	12	4.2	14	20	13	14	8.0	.85	.44
4	.77	5.6	7.1	11	10	23	16	36	11	15	.86	.51
5	.77	5.0	5.8	9.7	8.8	19	14	32	4.2	12	.76	.51
6	.77	4.4	5.2	8.4	5.4	16	14	24	7.4	9.6	.54	.44
7	1.1	4.6	12	7.0	4.6	15	13	19	7.1	7.3	.53	.37
8	1.4	5.8	17	6.4	4.4	17	14	17	7.1	5.6	1.2	.31
9	1.4	5.6	13	7.6	4.0	15	13	22	14	5.2	1.2	.31
10	4.0	5.0	14	17	3.6	13	12	21	34	4.2	1.1	.31
11	17	4.6	20	19	3.4	11	12	14	27	3.2	.93	.31
12	13	4.4	21	17	3.2	9.9	13	13	17	2.9	.85	.26
13	6.3	4.2	16	15	5.0	11	18	11	12	3.0	.59	.26
14	6.2	3.6	12	19	16	11	29	9.7	9.1	5.1	.59	.44
15	4.4	3.4	11	15	15	9.4	29	20	7.4	4.3	.59	.77
16	4.0	3.6	15	10	12	8.9	26	25	5.3	3.2	.51	.68
17	3.6	4.0	17	7.4	7.6	26	44	20	6.7	2.5	.44	.51
18	3.0	4.0	13	4.4	6.2	78	47	21	6.2	2.0	.51	.37
19	2.7	4.0	9.4	6.2	8.0	52	36	17	5.4	2.2	1.1	.51
20	2.5	4.0	8.0	6.0	6.7	40	40	14	6.6	3.5	.77	.77
21	2.4	4.0	7.8	6.0	5.6	30	42	14	6.4	2.3	.68	.68
22	2.4	4.2	7.1	5.8	5.4	43	31	13	5.7	1.7	.59	.59
23	2.4	4.4	6.2	5.4	5.2	80	36	11	7.4	2.2	.51	.44
24	2.4	3.6	7.8	5.8	5.0	49	33	8.5	8.1	2.0	.37	.37
25	3.0	3.4	15	7.4	4.8	34	26	7.4	9.2	2.2	.37	.37
26	4.2	3.8	11	7.4	4.6	26	21	6.3	7.7	2.7	.51	.37
27	4.0	3.8	11	6.0	4.5	20	17	5.5	6.8	1.5	1.2	.37
28	3.6	4.4	10	5.2	4.5	17	14	4.9	5.7	1.1	1.3	.27
29	3.4	4.6	9.7	5.0	4.5	17	13	4.4	4.9	.85	.77	.26
30	3.6	14	8.5	4.8	-----	20	11	3.9	4.7	.70	.68	.54
31	2.9	-----	7.6	4.6	-----	17	-----	4.8	-----	.90	.59	-----
TOTAL	111.92	136.7	353.5	279.7	180.8	754.4	690	454.4	361.7	129.85	23.49	13.08
MEAN	3.61	4.62	11.4	4.02	6.23	24.3	23.0	16.7	11.4	4.19	.76	.44
MAX	17	14	21	19	16	80	47	36	34	15	1.3	.77
MIN	.77	2.7	5.2	4.6	3.2	5.0	11	3.9	4.7	.70	.37	.26
CFS ²	.00	1.02	2.51	1.99	1.37	5.35	5.07	3.26	2.51	.42	.17	.10
IN ³	.42	1.14	2.90	2.29	1.42	6.18	5.05	3.72	2.90	1.06	.19	.11

CAL YR 1971 TOTAL 2,412.50 MEAN 6.61 MAX 48 MIN .26 CFS² 1.46 IN 19.77
 WTH YR 1972 TOTAL 3,471.54 MEAN 9.49 MAX 80 MIN .26 CFS² 2.09 IN 28.45

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	0430	2.48	93				
3-23	0100	2.51	97				
4-18	0700	2.27	67				

CONNECTICUT RIVER BASIN

01173500 Ware River at Gibbs Crossing, Mass.

LOCATION.--Lat 42°14'07", long 72°16'45", Hampshire County, on right bank 0.5 mile upstream from Gibbs Crossing, 1.8 miles upstream from Beaver Brook, 2.5 miles southwest of Ware, and 8.8 miles upstream from mouth.

DRAINAGE AREA.--199 sq mi.

PERIOD OF RECORD.--August 1912 to current year.

GAGE.--Water-stage recorder. Datum of gage is 372.79 ft above mean sea level. Prior to Mar. 1, 1930, at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--60 years, 314 cfs (21.43 inches per year), adjusted for diversion and storage.

EXTREMES.--Current year: Maximum discharge, 2,030 cfs Mar. 23 (gage height, 4.96 ft); minimum, 40 cfs Oct. 4, 5, 6; minimum daily, 41 cfs Oct. 4, 5. Period of record: Maximum discharge, 22,700 cfs Sept. 21, 1938 (gage height, 18.2 ft, from floodmarks), from rating curve extended above 4,600 cfs on basis of contracted-opening measurement at gage height 12.83 ft and slope-area measurement at gage height 18.2 ft; minimum, 5.0 cfs Oct. 26, 1914; minimum daily, 6.0 cfs Oct. 4, 1914. Maximum discharge since construction of Barre Falls Reservoir in 1958, 4,000 cfs Mar. 31, 1960 (gage height, 7.03 ft).

REMARKS.--Records good except those for winter period and those for July through September, which are fair. Diversion at times: since March 1931 from 97 sq mi for supply of Boston metropolitan district (see table below for figures of diversion) and since 1955 from 6.5 sq mi for municipal supply of Fitchburg. Regulation by Barre Falls Reservoir (see p. 207) since 1958. Flow regulated by mills above station prior to 1967.

REVISIONS (WATER YEARS).--WSP 661: Drainage area. WSP 1031: 1944. WSP 1301: 1914(M).

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	77	436	280	215	271	473	381	405	473	134	58
2	47	103	314	265	210	355	531	347	751	437	134	55
3	46	161	265	375	194	754	505	455	511	455	124	60
4	41	202	251	365	340	740	473	450	425	640	126	70
5	41	174	215	355	335	540	455	742	518	578	104	72
6	42	163	206	300	265	445	455	544	471	511	101	66
7	44	152	346	290	255	400	447	544	464	470	97	61
8	52	195	473	280	227	510	470	531	387	346	168	56
9	56	178	377	270	210	510	473	727	531	524	120	55
10	121	152	376	531	165	420	475	673	1,100	342	150	55
11	413	137	442	537	180	368	437	571	767	330	125	50
12	374	126	455	441	170	350	443	505	531	243	105	50
13	291	121	376	414	230	370	544	455	437	370	95	50
14	235	111	335	474	542	370	747	431	346	346	90	61
15	167	106	330	404	443	340	650	404	370	330	100	72
16	149	121	398	325	394	350	544	464	365	284	80	77
17	131	124	414	240	320	906	744	711	345	254	72	72
18	114	124	360	260	244	1,440	727	441	474	217	75	66
19	114	116	293	244	251	945	613	665	437	186	74	74
20	101	124	284	285	250	711	727	574	544	255	61	79
21	87	121	280	245	250	544	452	628	505	247	74	81
22	77	134	271	275	265	878	635	537	404	270	64	79
23	70	140	245	275	250	1,730	775	467	431	145	61	74
24	70	124	248	293	260	946	743	420	473	145	58	70
25	65	134	437	325	255	714	513	370	494	226	58	66
26	106	134	365	300	251	542	524	355	564	251	58	64
27	104	155	350	280	250	537	473	340	544	270	61	68
28	99	164	330	250	243	474	437	325	441	141	83	64
29	67	233	316	245	247	492	414	311	404	144	76	61
30	41	460	302	235	-----	550	342	248	392	131	68	66
31	74	-----	240	240	-----	445	-----	330	-----	116	63	-----
TOTAL	3,576	4,591	10,479	10,673	7,527	19,408	16,703	16,495	15,564	9,882	2,828	1,952
MEAN	115	153	338	325	270	626	537	514	514	319	91.2	65.1
MAX	463	460	473	537	542	1,730	852	950	1,100	660	150	81
MIN	41	77	200	235	176	271	342	248	365	118	58	50
(1)	0	+2.99	+72.9	+59.9	+20.0	+343	+431	+264	+150	0	0	0
MEAN†	115	156	411	385	295	965	987	810	669	319	91.1	65.1
CFSM†	.58	.78	2.07	1.93	1.48	4.85	4.96	4.07	3.36	1.60	.46	.33
IN.‡	.67	.88	2.38	2.23	1.60	5.59	5.54	4.69	3.75	1.85	.53	.36

CAL YR 1971 TOTAL 79,984 MEAN 219 MAX 986 MIN 41 MEAN‡ 265 CFSM‡ 1.33 IN‡ 18.08
WTR YR 1972 TOTAL 119,842 MEAN 327 MAX 1,730 MIN 41 MEAN‡ 440 CFSM‡ 2.21 IN‡ 30.07

† Diversion, in cubic feet per second, from 97 sq mi for supply of Boston metropolitan district; records furnished by Water Division of Metropolitan District Commission.

‡ Adjusted for diversion to Boston metropolitan district and for change in contents in Barre Falls Reservoir.

CONNECTICUT RIVER BASIN

189

01174000 Hop Brook near New Salem, Mass.

LOCATION.--Lat 42°28'42", long 72°20'08", Franklin County, on right bank 1.5 miles upstream from mouth and 1.5 miles south of New Salem.

DRAINAGE AREA.--3.39 sq mi.

PERIOD OF RECORD.--October 1947 to current year. Monthly discharge only October 1947, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 725 ft (from topographic map).

AVERAGE DISCHARGE.--25 years, 5.73 cfs (22.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 176 cfs Mar. 22 (gage height, 2.58 ft); minimum, 0.06 cfs Sept. 8, 9.

Period of record: Maximum discharge, 289 cfs Oct. 24, 1939 (gage height, 3.17 ft), from rating curve extended above 130 cfs; minimum, 0.004 cfs Aug. 3, 9, 10, 1935.

REMARKS.--Records good except those for winter period, which are fair. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	1.5	8.1	6.7	3.4	5.9	16	8.7	66	11	1.2	.80
2	.30	6.4	5.0	11	3.4	9.3	16	12	15	6.4	.80	.45
3	.30	5.2	4.5	12	3.9	25	14	15	9.9	7.8	.84	.42
4	.30	3.2	4.0	8.1	9.0	11	12	29	9.0	7.5	.93	.36
5	.45	2.5	3.7	7.5	5.0	8.1	11	16	8.1	5.7	.59	.25
6	.48	2.2	4.5	6.4	4.2	6.2	11	12	6.9	5.2	.52	.19
7	.63	6.4	16	6.4	4.0	5.9	11	10	7.5	4.8	.71	.15
8	.52	4.3	9.3	5.2	3.5	12	9.6	12	7.5	3.5	1.5	.11
9	.42	2.8	7.5	7.5	3.3	8.1	9.9	20	19	3.5	1.1	.13
10	20	2.6	9.9	16	3.1	7.2	10	12	32	2.8	1.4	.25
11	10	2.5	21	11	3.1	5.9	10	10	11	2.5	.75	.15
12	3.5	2.5	13	9.9	3.0	5.7	11	9.3	12	2.2	.63	.15
13	2.3	2.5	9.9	12	5.5	5.9	18	8.4	8.1	4.2	.59	.36
14	1.9	2.3	8.7	20	12	5.5	23	7.8	6.9	6.2	.52	1.9
15	1.7	2.4	9.6	9.6	9.0	5.5	17	32	6.4	2.8	.59	1.4
16	1.6	4.5	16	7.2	6.4	5.7	21	21	6.2	2.3	1.2	.71
17	1.4	3.2	12	6.4	4.3	56	43	14	5.7	2.2	1.5	.48
18	1.4	2.6	9.6	6.4	3.7	52	25	14	4.7	1.7	.88	.36
19	1.3	2.6	7.5	6.6	3.4	25	22	11	4.7	1.7	1.5	.93
20	1.3	2.6	7.8	6.4	4.5	16	34	12	6.4	2.1	.59	.93
21	1.2	2.5	7.2	6.4	4.0	14	24	13	4.7	1.4	.52	.59
22	1.2	3.4	5.9	5.7	4.5	69	18	9.3	4.5	1.2	.38	.52
23	1.2	2.6	5.5	6.2	4.0	59	39	7.2	6.9	1.5	.25	.39
24	1.2	2.3	13	6.2	4.2	29	23	6.7	15	1.5	.25	.36
25	5.7	2.6	12	13	3.5	20	16	9.0	9.6	1.3	.23	.33
26	3.4	2.9	9.0	8.4	3.2	16	13	5.7	9.6	2.9	.33	.33
27	2.3	2.6	8.7	5.5	2.9	13	12	4.3	6.7	.93	.71	.33
28	2.0	4.2	9.6	5.2	3.1	12	11	3.7	4.7	.80	5.9	.25
29	1.8	6.7	8.4	4.7	3.4	16	9.9	3.5	3.9	.63	1.2	.23
30	1.6	20	6.9	4.7	-----	15	9.3	6.4	16	.59	.63	.71
31	1.5	-----	7.2	4.0	-----	12	-----	15	-----	.63	.42	-----
TOTAL	73.26	114.6	281.0	252.3	130.5	556.9	519.7	370.0	328.6	98.68	29.08	14.52
MEAN	2.36	3.82	9.06	8.14	4.50	18.0	17.3	11.9	11.0	3.18	.94	.48
MAX	20	20	21	20	12	69	43	32	80	11	5.9	1.9
MIN	.30	1.5	3.7	4.0	2.9	5.5	9.3	3.5	3.9	.59	.23	.11
CFSM	.70	1.13	2.67	2.40	1.33	5.31	5.10	3.51	3.24	.94	.28	.14
IN.	.90	1.26	3.08	2.77	1.43	6.11	5.70	4.08	3.61	1.08	.32	.16

CAL YR 1971 TOTAL 1,812.17 MEAN 4.96 MAX 41 MIN .02 CFSM 1.48 IN 19.80
 WTR YR 1972 TOTAL 2,769.14 MEAN 7.57 MAX 69 MIN .11 CFSM 2.73 IN 30.39

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	1815	2.58	176				
6-1	0315	2.41	139				

CONNECTICUT RIVER BASIN

01174500 East Branch Swift River near Hardwick, Mass.

LOCATION.--Lat 42°23'36", long 72°14'21", Worcester County, on left bank 100 ft above spillway of regulating dam and 4.6 miles northwest of Hardwick.

DRAINAGE AREA.--43.7 sq mi.

PERIOD OF RECORD.--January 1937 to current year. Published as "near Dana" January 1937 to September 1939.

GAGE.--Water-stage recorder. Concrete spillway since Mar. 12, 1940. Datum of gage is 504.70 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 66.5 cfs (20.67 inches per year).

EXTREMES.--Current year: Maximum discharge, 575 cfs Mar. 23, June 1 (gage height, 20.55 ft); minimum, 3.7 cfs Sept. 11-13.
Period of record: Maximum discharge, 6,780 cfs Sept. 21, 1938, average of slope-area and contracted-opening measurements; maximum gage height, 22.49 ft June 25, 1944; no flow at times during several years.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	16	147	65	46	45	144	103	436	78	19	9.4
2	8.9	19	104	68	44	64	169	106	408	76	18	8.4
3	4.7	22	74	100	46	118	175	135	225	72	17	7.9
4	4.0	27	41	103	67	176	161	340	153	81	17	7.1
5	7.7	30	47	78	74	171	144	328	128	71	14	6.7
6	7.9	28	45	80	62	129	136	226	105	63	12	5.9
7	8.6	32	84	68	66	101	143	175	99	54	12	5.3
8	8.6	42	122	67	47	108	125	159	95	46	15	4.6
9	8.3	41	109	59	42	123	111	201	149	39	15	4.9
10	7.0	36	98	104	40	106	107	200	334	32	15	5.2
11	6.7	33	118	142	37	89	112	165	299	29	13	4.0
12	6.2	30	154	136	35	42	116	140	192	27	11	3.7
13	6.7	29	132	129	38	81	154	118	138	29	11	4.1
14	4.8	26	106	151	79	94	252	105	109	40	10	6.6
15	4.0	25	94	155	66	93	247	148	95	37	11	8.6
16	3.7	29	105	110	64	81	222	233	86	38	9.9	8.0
17	2.5	29	122	74	80	148	379	227	87	28	8.5	7.7
18	2.1	29	114	63	64	443	399	191	80	21	9.7	7.7
19	1.8	27	88	66	72	414	310	157	73	22	14	9.5
20	7.5	29	79	69	65	240	324	134	85	34	13	1.0
21	1.6	29	73	69	52	204	367	145	81	32	11	8.6
22	1.8	29	68	63	48	215	269	133	75	30	9.7	8.5
23	1.6	29	53	61	43	534	321	110	79	28	9.2	7.7
24	1.6	26	66	62	46	447	330	95	107	30	9.0	6.7
25	1.8	37	116	74	45	289	760	78	114	30	9.6	6.4
26	2.1	35	113	91	51	209	201	66	98	34	8.4	6.7
27	2.2	32	98	78	49	172	165	63	87	29	10	6.6
28	2.2	40	89	66	45	147	141	60	75	25	12	6.1
29	2.0	57	85	55	43	143	127	54	66	21	12	5.6
30	1.8	132	83	51	-----	163	110	48	66	18	11	6.0
31	1.7	-----	80	50	-----	155	-----	72	-----	16	11	-----
TOTAL	707.1	1,027	2,931	2,615	1,606	5,612	6,221	4,515	4,224	1,210	375.5	203.3
MEAN	22.8	34.2	94.5	84.4	55.4	181	207	146	141	39.0	12.1	6.78
MAX	82	132	154	159	94	534	399	340	436	81	19	10
MIN	7.7	16	45	50	35	45	107	48	66	16	8.4	3.7
CFSM	.52	.78	2.16	1.93	1.27	4.14	4.74	3.34	3.23	.89	.28	.16
IN.	.60	.87	2.30	2.23	1.37	4.78	5.30	3.84	3.60	1.03	.32	.17

CAL YR 1971 TOTAL 19,862.3 MEAN 54.4 MAX 438 MIN 3.7 CFSM 1.24 IN 16.91
WTR YR 1972 TOTAL 31,246.9 MEAN 85.4 MAX 534 MIN 3.7 CFSM 1.95 IN 26.60

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	2000	20.44	498	5-4	1700	20.28	392
3-23	1200	20.55	575	6-1	1700	20.55	575
4-17	2200	20.34	431	6-10	1800	20.28	392
4-23	1800	20.23	360				

CONNECTICUT RIVER BASIN

191

01174600 Cadwell Creek near Pelham, Mass.

LOCATION.--Lat 42°21'16", long 72°23'18", Hampshire County, on left bank 0.8 mile east of Knights Corner, 2 miles upstream from mouth, 2.7 miles south of Pelham, and 5 miles north of Belchertown.

DRAINAGE AREA.--0.63 sq mi.

PERIOD OF RECORD.--July 1961 to current year.

GAGE.--Water-stage recorder and concrete control with V-notch sharp-crested weir. Altitude of gage is 860 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 1.01 cfs (21.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 32 cfs Mar. 22 (gage height, 4.94 ft), from rating curve extended above 10 cfs; no flow for part of each day Sept. 6, 7.

Period of record: Maximum discharge, 36 cfs Feb. 3, 1970 (gage height, 5.06 ft), from rating curve extended above 10 cfs; no flow at times.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.33	2.5	1.0	.50	1.2	2.3	1.0	1.8	3.7	.30	.01
2	.08	1.1	1.5	2.0	.50	2.0	2.4	1.3	4.5	1.9	.15	.01
3	.08	1.1	1.1	2.4	.52	6.7	2.0	2.8	2.5	2.8	.17	.02
4	.08	.44	1.0	1.7	1.6	3.8	1.8	7.0	1.8	2.8	.20	.02
5	.08	.60	.87	1.6	.56	2.3	1.8	3.8	7.3	1.8	.10	.01
6	.08	.50	.96	1.3	1.0	1.7	1.8	2.3	3.0	1.4	.08	.01
7	.11	1.3	6.4	1.1	.65	1.4	1.7	1.8	2.5	1.1	.12	.01
8	.11	1.0	3.8	1.0	.55	2.5	1.5	2.5	2.0	1.3	.30	.01
9	.08	.70	2.4	1.2	.47	3.0	1.6	4.9	5.5	1.5	.14	.02
10	4.5	.60	3.6	2.4	.50	1.4	1.7	2.8	13	.89	.12	.03
11	2.5	.55	6.4	2.7	.50	1.0	1.9	2.0	4.0	.65	.08	.01
12	1.3	.50	3.4	2.7	.55	.56	2.3	1.6	2.1	.52	.07	.01
13	.74	.46	2.2	2.4	.56	1.1	4.4	1.3	1.7	1.4	.07	.03
14	.56	.39	1.8	4.6	2.3	1.1	5.5	1.2	1.4	1.2	.12	.12
15	.47	.44	2.1	2.1	1.7	1.0	3.4	6.4	1.2	.70	.47	.09
16	.40	1.1	4.2	1.2	1.3	1.0	2.8	6.1	1.2	.52	.13	.04
17	.34	.86	2.6	.95	.50	13	5.1	3.3	1.3	.45	.12	.03
18	.31	.67	1.9	.45	.70	12	2.8	3.4	.98	.36	.12	.03
19	.29	.62	1.3	.96	.85	5.5	2.1	2.3	.97	.31	.10	.18
20	.26	.65	1.3	.86	.70	3.3	6.0	2.3	3.3	.28	.06	.10
21	.25	.62	1.2	.90	.68	2.7	4.4	2.5	1.6	.27	.05	.05
22	.24	.77	1.0	.83	.86	13	2.8	1.7	1.4	.23	.04	.05
23	.34	.65	.86	.93	.84	13	6.6	1.3	1.8	.22	.03	.04
24	.26	.52	2.4	1.0	.86	5.7	3.7	1.1	4.5	.23	.02	.03
25	1.2	.57	2.5	2.5	.58	3.5	2.5	.56	2.8	.62	.03	.03
26	.84	.57	1.8	1.6	.58	2.8	1.9	.86	2.7	.49	.03	.03
27	.60	.57	1.9	.56	.58	2.1	1.7	.77	1.8	.25	.03	.03
28	.49	1.1	1.9	.80	.56	2.0	1.4	.67	1.4	.18	.04	.02
29	.41	2.1	1.5	.77	.57	2.6	1.2	.57	1.4	.13	.03	.02
30	.37	6.3	1.2	.73	-----	2.5	1.1	.52	5.2	.10	.02	.14
31	.34	-----	1.2	.67	-----	1.9	-----	2.4	-----	.10	.01	-----
TOTAL	19.13	28.08	68.55	47.81	22.52	116.76	82.2	73.45	103.05	24.38	3.35	1.23
MEAN	.62	.94	2.21	1.54	.79	3.77	2.74	2.37	3.44	.92	.11	.041
MAX	4.8	6.3	6.4	4.6	2.2	13	6.8	7.0	18	3.7	.47	.18
MIN	.08	.33	.93	.67	.47	.66	1.1	.52	.97	.10	.01	.01
CFSM	.08	1.44	3.51	2.44	1.25	5.98	4.35	3.76	5.46	1.46	.17	.07
IN.	1.73	1.86	4.05	2.82	1.75	6.95	4.85	4.34	6.08	1.68	.20	.07

CAL YR 1971 TOTAL 411.68 MEAN 1.13 MAX 16 PIA .01 CFSM 1.79 IN 24.31
WTR YR 1972 TOTAL 594.88 MEAN 1.63 MAX 18 PIA .01 CFSM 2.59 IN 25.13

PEAK DISCHARGE (BASE, 18 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	1715	4.60	20	6-5	0330	4.52	18
3-22	1745	4.94	32	6-10	0415	4.62	21
6-1	0130	4.92	31				

CONNECTICUT RIVER BASIN

01174900 Cadwell Creek near Belchertown, Mass.

LOCATION.--Lat 42°20'08", long 72°22'12", Hampshire County, on left bank 200 ft upstream from mouth, 2 miles southeast of Knights Corner, and 4.5 miles north of Belchertown.

DRAINAGE AREA.--2.81 sq mi.

PERIOD OF RECORD.--July 1961 to current year.

GAGE.--Water-stage recorder and concrete control with V-notch sharp-crested weir. Altitude of gage is 540 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 4.16 cfs (20.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 138 cfs June 1 (gage height, 6.81 ft); minimum, 0.19 cfs Sept. 7, 8, 12, 13.

Period of record: Maximum discharge, 190 cfs Feb. 3, 1970 (gage height, 7.05 ft); minimum, 0.07 cfs several times in water years 1964, 1965, and 1966.

REMARKS.--Records good except those for period of doubtful or no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt. 1967: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	1.3	9.1	4.3	2.5	5.0	9.5	5.0	76	12	1.8	.27
2	.63	4.5	5.9	7.0	2.8	7.9	9.7	5.8	19	7.1	1.3	.27
3	.59	4.5	4.9	8.4	2.8	29	8.6	11	10	12	1.2	.31
4	.58	3.5	4.2	5.9	6.3	14	7.7	21	7.9	12	1.3	.31
5	.57	2.7	3.6	5.7	4.0	8.6	7.4	15	19	7.3	.85	.27
6	.56	2.3	4.0	4.6	3.4	6.7	7.6	9.7	11	6.3	.79	.21
7	.64	5.5	21	4.6	3.2	6.5	7.6	7.8	9.5	4.9	.87	.21
8	.72	4.2	13	4.0	3.0	10	6.3	6.7	7.7	5.5	2.0	.21
9	.63	3.4	8.5	4.5	2.7	8.1	6.3	19	14	7.4	1.3	.28
10	14	3.0	11	9.8	2.6	7.2	6.8	11	38	4.7	1.1	.34
11	13	2.6	21	8.5	2.6	6.3	7.3	8.2	18	3.8	.81	.22
12	6.0	2.3	11	7.8	2.5	5.4	8.8	7.0	10	3.2	.73	.21
13	3.4	2.2	7.7	8.6	3.4	5.7	16	6.2	7.6	5.6	.71	.32
14	2.5	2.0	6.3	15	8.4	5.4	20	5.5	6.3	5.7	.87	.77
15	2.1	2.4	7.7	7.6	6.8	5.5	12	23	5.6	3.7	2.9	.77
16	1.8	4.5	13	4.9	5.7	5.2	11	23	5.4	3.0	1.2	.52
17	1.5	3.7	8.8	4.3	4.2	57	20	12	6.3	2.6	.97	.36
18	1.4	3.1	6.7	4.3	3.7	53	11	11	4.8	2.3	.98	.31
19	1.3	2.8	5.4	4.4	3.2	22	9.1	8.2	4.9	2.1	.89	.85
20	3.2	2.9	5.2	4.0	3.7	13	23	8.9	17	1.9	.65	.87
21	1.2	2.7	4.9	3.9	3.5	10	17	5.4	7.4	1.8	.59	.53
22	1.1	3.3	4.3	3.7	3.4	46	11	7.1	6.4	1.7	.52	.49
23	1.1	3.0	3.9	3.9	3.4	52	26	5.7	7.2	1.5	.46	.38
24	1.2	2.7	8.6	4.3	3.7	24	14	5.0	16	1.4	.45	.33
25	9.0	2.8	8.5	8.8	3.2	15	10	4.4	10	4.9	.45	.33
26	3.5	2.6	6.6	5.5	2.9	12	8.1	3.9	9.7	3.5	.46	.33
27	2.8	2.8	6.3	4.1	2.9	9.5	7.2	3.7	7.2	2.0	.44	.33
28	2.3	5.0	6.2	3.7	2.9	9.1	6.4	3.3	5.5	1.5	.49	.28
29	3.6	8.2	5.3	3.5	2.2	11	5.8	3.0	5.1	1.2	.37	.27
30	1.7	24	5.0	3.4	-----	10	5.3	2.8	18	1.0	.31	.66
31	1.6	-----	4.7	3.1	-----	9.5	-----	11	-----	1.0	.28	-----
TOTAL	77.24	121.0	242.3	176.0	107.5	489.6	326.5	297.3	390.5	134.6	28.12	11.81
MEAN	2.49	4.03	7.82	5.68	3.71	15.8	10.9	9.59	13.0	4.34	.91	.39
MAX	14	24	21	15	8.4	57	26	31	76	12	2.9	.87
MIN	.57	1.5	3.6	3.1	2.5	5.0	5.3	2.8	4.8	1.0	.28	.21
CFSM	.89	1.43	2.78	2.02	1.32	5.62	3.88	3.41	4.63	1.54	.32	.14
IN.	1.02	1.60	3.21	2.33	1.42	6.47	4.32	3.94	5.17	1.78	.37	.16

CAL YR 1971 TOTAL 1,592.72 MEAN 4.36 MAX 61 MIN .15 CFSM 1.55 IN 21.09
WTR YR 1972 TOTAL 2,401.47 MEAN 6.56 MAX 76 MIN .21 CFSM 2.33 IN 31.79

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	1815	6.54	93				
3-22	1930	6.78	132				
6-1	0430	6.81	138				

NOTE.--Doubtful or no gage-height record Oct. 10 to Nov. 16.

CONNECTICUT RIVER BASIN

193

01175500 Swift River at West Ware, Mass.

LOCATION.--Lat 42°16'04", long 72°19'59", Hampshire County, on left bank at West Ware, 1.4 miles downstream from Quabbin Reservoir, 3.5 miles east of Belchertown, and 8.0 miles upstream from mouth.

DRAINAGE AREA.--188 sq mi, includes 1.6 sq mi drained by Beaver Brook, flow of which is diverted from Ware River basin. Prior to January 1937, 186 sq mi.

PERIOD OF RECORD.--July 1910 to September 1912 (twice-daily gage heights and corresponding discharges), October 1912 to current year.

GAGE.--Water-stage recorder. Datum of gage is 365.18 ft above mean sea level. Prior to Aug. 25, 1912, nonrecording gage at site 400 ft upstream at same datum.

AVERAGE DISCHARGE.--60 years (1912-72), 298 cfs (21.53 inches per year), adjusted for storage and diversions.

EXTREMES.--Current year: Maximum discharge, 177 cfs June 28 (gage height, 2.96 ft); minimum daily, 20 cfs June 27.

Period of record: Maximum discharge, 7,590 cfs Mar. 19, 1936 (gage height, 15.00 ft); minimum daily, 9.1 cfs Dec. 15, 1968. Maximum discharge since construction of Quabbin Reservoir in 1939, 1,870 cfs Apr. 30, 1956 (gage height, 8.37 ft).

REMARKS.--Records good. Flow regulated since August 1939 by Quabbin Reservoir (see p. 207). Diversion from Ware River to Quabbin Reservoir since 1940, from Quabbin Reservoir to Wachusett Reservoir since 1941, from Quabbin Reservoir to Chicopee Valley aqueduct since 1950, and at times since January 1966 from Quabbin Reservoir to city of Worcester. No diversion to city of Worcester during year.

REVISIONS (WATER YEARS).--WSP 401: Drainage area. WSP 451: 1916. WSP 871: 1919. WSP 1031: 1944 (changes in reservoir contents and adjusted figures only). WSP 1301: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	46	38	38	38	38	45	47	48	48	39	38
2	82	39	38	38	36	39	29	41	42	28	39	44
3	82	39	37	51	36	42	46	43	46	56	39	30
4	82	38	43	40	36	43	40	46	29	30	38	30
5	88	38	26	39	43	28	40	42	51	49	43	47
6	90	43	45	39	26	45	39	47	41	41	26	38
7	53	27	42	38	43	38	42	29	41	40	46	38
8	38	46	39	43	38	42	44	48	40	48	39	72
9	43	38	39	26	36	39	28	43	43	33	39	90
10	34	38	39	48	36	37	47	41	54	48	38	92
11	33	38	44	39	36	43	40	41	31	40	38	92
12	49	37	27	39	43	27	39	40	48	40	43	92
13	38	43	46	39	29	45	43	46	41	42	26	94
14	38	26	38	39	46	38	41	28	40	41	46	94
15	38	45	39	43	38	38	47	53	60	45	39	94
16	44	38	40	26	37	38	33	45	40	27	38	93
17	26	37	39	46	37	42	35	42	52	47	33	95
18	47	36	43	39	37	43	50	41	30	39	38	94
19	38	37	26	37	44	27	40	41	48	39	43	95
20	38	43	45	37	30	45	44	47	42	39	26	95
21	38	26	38	37	30	39	42	30	41	39	46	94
22	38	45	38	42	57	39	47	47	41	44	32	94
23	45	37	38	26	36	39	35	40	41	27	42	91
24	30	43	27	44	38	43	51	39	50	46	38	94
25	31	26	39	39	36	47	42	39	29	41	39	94
26	48	45	38	37	43	30	41	39	48	40	44	93
27	38	43	50	36	26	47	40	46	20	39	27	95
28	38	26	39	36	44	40	40	32	51	39	45	94
29	38	46	38	43	37	40	45	32	41	44	38	95
30	44	42	38	25	-----	40	29	48	43	27	37	93
31	26	-----	26	44	-----	40	-----	42	-----	46	38	-----
TOTAL	1,477	1,151	1,182	1,193	1,092	1,221	1,224	1,285	1,252	1,252	1,182	2,394
MEAN	47.6	38.4	38.1	38.5	37.7	39.4	40.8	41.5	41.7	40.4	38.1	79.8
MAX	90	46	50	51	57	47	51	53	54	56	46	95
MIN	26	26	26	25	26	27	28	28	20	27	26	30
MEAN†	147	241	503	342	323	815	749	746	630	201	36.6	16.0
CFSM†	.78	1.28	2.68	1.82	1.72	4.34	3.98	3.97	3.35	1.07	.19	.09
IN-†	.90	1.43	3.08	2.10	1.85	5.00	4.45	4.57	3.74	1.23	.22	.09

CAL YR 1971 TOTAL 17,539 MEAN 48.1 MAX 95 MIN 24 MEAN† 281 CFSM† 1.49 IN† 20.29
WTR YR 1972 TOTAL 15,905 MEAN 43.5 MAX 95 MIN 20 MEAN† 396 CFSM† 2.11 IN† 28.67

† Adjusted for diversions and change in contents in Quabbin Reservoir.

CONNECTICUT RIVER BASIN

01175670 Severn River near Spencer, Mass.

LOCATION.--Lat 42°15'54", long 72°00'19", Worcester County, on right bank 40 ft upstream from bridge on Cooney Road and 1.5 miles north of Spencer.

DRAINAGE AREA.--8.58 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1960. October 1960 to current year. October and November 1960 monthly discharge only, published in WSP 1901.

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 12.9 cfs (20.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 144 cfs June 10 (gage height, 4.13 ft); maximum gage height, 4.52 ft Mar. 3 (backwater from ice); minimum discharge not determined; minimum daily, 0.74 cfs Oct. 3-5.

Period of record: Maximum discharge, 412 cfs Mar. 18, 1968 (gage height, 5.19 ft), from rating curve extended above 160 cfs; maximum gage height, 5.41 ft Mar. 7, 1963 (backwater from ice); minimum discharge, 0.15 cfs Sept. 12, 1963.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation by ponds above station since 1971.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.3	20	14	11	14	30	27	54	22	6.0	4.96
2	4.76	3.4	17	15	11	25	40	27	53	19	5.4	4.87
3	4.74	6.7	16	21	11	50	40	29	39	20	5.1	3.3
4	4.74	7.0	13	20	30	70	38	54	38	30	4.6	5.0
5	4.74	5.9	11	20	25	55	36	50	21	23	4.2	4.0
6	4.7	5.1	10	14	21	47	36	41	53	21	3.8	3.9
7	1.1	6.2	24	17	19	43	35	35	40	17	4.1	3.7
8	1.1	7.2	25	15	18	48	33	33	35	16	4.5	2.7
9	1.3	6.3	21	15	17	50	31	43	42	21	7.0	3.6
10	4.2	5.6	22	24	15	40	30	44	44	15	3.7	2.3
11	4.6	5.1	30	30	15	36	29	38	65	13	5.9	1.2
12	5.3	4.5	33	29	15	33	30	34	50	11	4.4	1.0
13	4.2	4.5	28	27	20	33	36	29	40	12	4.0	1.2
14	6.3	4.4	24	30	40	32	49	27	35	18	3.7	2.1
15	4.4	4.0	23	23	37	33	45	41	31	15	4.6	3.1
16	3.1	4.4	27	21	30	34	41	53	24	12	6.2	2.7
17	2.9	4.7	26	19	24	64	55	44	31	10	4.7	2.7
18	3.6	4.6	25	17	21	115	57	39	27	8.5	4.1	3.9
19	3.6	4.5	21	16	14	84	50	34	26	12	3.9	4.6
20	3.3	4.5	19	15	14	62	58	31	32	30	3.5	6.2
21	3.1	4.6	18	15	14	54	66	34	27	19	2.4	4.2
22	3.1	5.4	16	14	20	78	54	31	27	14	2.2	5.4
23	3.1	5.9	15	14	14	108	62	27	36	12	1.5	4.4
24	3.1	5.9	17	15	18	81	61	24	34	10	1.3	3.4
25	4.0	6.0	21	16	18	63	53	21	24	14	1.4	2.2
26	4.5	10	20	15	17	53	45	19	26	14	2.3	1.9
27	4.2	7.6	19	16	17	46	34	17	26	12	1.4	2.4
28	4.2	9.3	18	14	17	40	35	16	22	9.0	2.9	2.3
29	4.1	11	17	13	17	34	32	14	20	7.4	1.3	2.5
30	4.3	22	16	12	-----	41	24	13	20	6.2	1.9	2.7
31	3.3	-----	18	11	-----	38	-----	17	-----	5.0	1.3	-----
TOTAL	104.25	191.9	632	567	578	1,606	1,241	990	1,172	473.1	124.7	42.43
MEAN	3.32	6.40	20.4	18.3	19.9	51.8	42.7	31.9	34.1	15.3	4.02	3.08
MAX	4.6	22	33	30	40	115	66	54	49	30	4.6	6.2
MIN	4.74	3.3	10	11	11	19	24	13	20	5.0	1.3	4.7
CFS [†]	4.1	7.5	2.38	2.13	2.32	6.34	4.96	3.72	4.56	1.78	4.7	3.6
IN.	4.7	4.3	2.74	2.46	2.51	6.96	5.55	4.29	5.04	2.05	5.4	4.0

CAL YR 1971 TOTAL 4,678.22 MEAN 12.8 MAX 80 MIN .49 CFS[†] 1.49 IN 20.24WTR YR 1972 TOTAL 7,817.38 MEAN 21.4 MAX 115 MIN .74 CFS[†] 2.49 IN 33.59

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	-	-	†75	6-1	1200	3.51	64
3-18	0930	4.00	123	6-5	0200	3.99	122
3-22	1915	4.02	126	6-10	0615	4.13	144
4-21	0045	3.58	71				

† About.

CONNECTICUT RIVER BASIN

1951

01176000 Quabaug River at West Brimfield, Mass.

LOCATION.--Lat 42°10'56", long 72°15'51", Hampden County, on right bank 10 ft upstream from abandoned highway-bridge site at West Brimfield, 0.9 mile upstream from Blodgett Mill Brook, 3.5 miles northeast of Palmer, and 9.9 miles upstream from mouth.

DRAINAGE AREA.--151 sq mi.

PERIOD OF RECORD.--August 1909 to August 1912 (twice-daily gage heights and corresponding discharges), September 1912 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map). Prior to Aug. 19, 1912, nonrecording gage, and Aug. 19, 1912, to Oct. 31, 1955, water-stage recorder, at several sites 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--60 years (1912-72), 238 cfs (21.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,550 cfs Mar. 22 (gage height, 6.43 ft); minimum, 26 cfs Oct. 9.

Period of record: Maximum discharge, 12,800 cfs Aug. 19, 1955 (gage height, 15.36 ft, from floodmarks, present site and datum), from rating curve extended above 2,700 cfs on basis of slope-area measurement of peak flow; minimum daily, 6.6 cfs Sept. 28, 29, 1957.

REMARKS.--Records excellent except those for winter period, which are fair. Slight diurnal fluctuation at low flow caused by mill above station prior to 1950; regulation much greater prior to 1938. High flow slightly affected by retarding reservoirs since 1965. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 451: 1916. WSP 711: Drainage area. WSP 1301: 1918(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	61	241	250	185	258	768	530	535	420	135	83
2	35	73	187	255	180	300	729	506	573	383	128	80
3	32	86	275	280	180	727	682	510	589	372	123	87
4	31	87	255	299	210	813	661	627	589	421	119	94
5	29	87	275	301	230	989	636	630	676	399	111	92
6	32	90	310	250	250	938	620	634	728	391	115	91
7	34	98	316	245	230	929	598	609	731	365	102	91
8	29	102	310	230	215	965	566	557	693	363	113	87
9	30	105	309	270	195	789	533	660	722	461	114	85
10	64	105	321	352	180	812	516	645	1,080	361	114	80
11	121	100	328	379	170	747	509	625	1,010	318	109	73
12	120	96	346	397	160	683	496	596	983	290	112	72
13	124	93	339	407	175	651	532	565	910	298	105	68
14	117	90	341	415	325	615	582	525	826	319	94	65
15	107	89	350	406	440	573	587	627	735	282	103	63
16	103	93	355	330	427	548	584	647	672	259	101	62
17	55	96	340	295	426	819	640	659	637	243	101	60
18	84	91	335	275	358	1,140	636	702	595	224	99	60
19	76	88	300	260	372	1,240	638	684	553	205	96	70
20	65	85	302	274	281	1,240	732	656	560	198	92	86
21	63	85	282	261	250	1,180	771	648	527	203	92	90
22	59	85	233	250	290	1,260	764	612	505	203	90	90
23	55	78	175	239	280	1,480	837	569	513	197	91	86
24	55	86	276	247	270	1,470	843	524	540	188	93	85
25	60	82	280	259	260	1,390	818	485	518	181	95	80
26	61	92	299	185	250	1,270	773	434	496	177	87	74
27	74	110	297	220	245	1,160	720	391	490	168	94	76
28	67	125	286	210	240	1,040	664	354	456	164	92	70
29	64	151	282	200	237	958	616	320	419	156	86	67
30	67	254	273	195	-----	899	571	289	418	145	83	71
31	63	-----	265	190	-----	828	-----	299	-----	138	88	-----
TOTAL	2,057	2,963	3,098	6,636	7,562	28,308	19,624	17,159	19,281	8,492	3,177	2,338
MEAN	66.4	58.8	29.3	279	261	913	554	554	643	274	102	77.9
MAX	124	254	355	415	440	1,480	843	702	1,080	461	135	94
MIN	29	61	175	185	160	258	496	289	418	138	83	60
CFSM	.44	.65	1.94	1.85	1.73	6.05	4.33	3.67	4.26	1.81	.68	.52
IN.	.51	.73	2.24	2.13	1.88	6.57	4.83	4.23	4.75	2.09	.78	.58

CAL YR 1971 TOTAL 71,594 MEAN 196 MAX 684 MIN 26 CFSM 1.30 IN 17.64
WTR YR 1972 TOTAL 128,685 MEAN 352 MAX 1,480 MIN 29 CFSM 2.33 IN 31.70

PEAK DISCHARGE (BASE, 840 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-8	1200	5.39	920	4-24	0400	5.26	855
3-19	2200	5.99	1,260	6-10	0700	5.92	1,220
3-22	2200	6.43	1,550				

CONNECTICUT RIVER BASIN

01177000 Chicopee River at Indian Orchard, Mass.

LOCATION.--Lat 42°09'38", long 72°30'52", Hampden County, on left bank 1,000 ft downstream from West Street Bridge at Indian Orchard, 1.1 miles upstream from Fuller Brook, and 7.2 miles upstream from mouth.

DRAINAGE AREA.--688 sq mi.

PERIOD OF RECORD.--August 1928 to current year. Published as "at Birchem Bend" prior to November 1938.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (from topographic map). Prior to Nov. 1, 1938; water-stage recorder at site 1.8 miles downstream at different datum.

AVERAGE DISCHARGE.--44 years, 1,067 cfs (21.06 inches per year), adjusted to present drainage area and for storage and diversions.

EXTREMES.--Current year: Maximum discharge, 5,270 cfs Mar. 23 (gage height, 9.39 ft); minimum daily, 149 cfs Oct. 9.
Period of record: Maximum discharge, 45,200 cfs Sept. 21, 1938, by computation of flow over dam; minimum daily, 16 cfs several times in 1929-31.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversion since 1941 from 186 sq mi in Swift River basin and at times since 1931 from 97 sq mi in Ware River basin for Boston metropolitan district; since 1950, for city of Chicopee; since 1952, for South Hadley; and, at times since 1966, for city of Worcester. Diversion from Ludlow Reservoir for Springfield and, prior to 1952, for Chicopee. See table below for figures of diversion. Flow regulated by powerplants above station, by Quabbin Reservoir (21 miles upstream) on Swift River since 1939, by Barre Falls Reservoir on Ware River since 1958, by Conant Brook Reservoir since 1966 (see p. 207), and by smaller reservoirs.

REVISIONS (WATER YEARS).--WSP 711: Drainage area. WSP 1231: 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	279	1,010	800	641	933	1,800	1,370	2,080	1,450	492	227
2	253	326	581	900	568	1,150	1,770	1,300	2,330	1,220	486	250
3	207	395	800	1,000	632	2,540	1,770	1,360	1,730	1,140	425	280
4	243	469	900	1,110	1,060	2,980	1,660	2,280	1,430	1,560	468	314
5	216	423	700	1,110	920	2,390	1,630	2,370	1,940	1,400	400	259
6	219	339	600	916	771	1,960	1,610	1,910	1,790	1,260	344	414
7	264	437	900	866	885	1,770	1,600	1,670	1,660	1,130	393	250
8	233	471	1,500	879	768	2,050	1,510	1,570	1,540	963	509	245
9	149	469	1,300	760	679	2,090	1,390	1,930	1,620	1,640	445	267
10	353	375	1,000	1,340	662	1,810	1,450	1,990	3,200	1,330	336	327
11	809	420	1,050	1,570	622	1,600	1,430	1,740	2,790	1,030	332	330
12	725	366	900	1,440	556	1,500	1,360	1,570	2,190	858	520	307
13	615	335	1,050	1,360	606	1,560	1,600	1,430	1,850	849	577	308
14	486	272	1,000	1,390	1,620	1,580	2,170	1,290	1,660	1,050	428	330
15	410	390	1,200	1,370	1,610	1,410	1,950	1,820	1,490	1,180	326	330
16	395	378	1,300	1,010	1,360	1,380	1,740	2,350	1,370	815	544	326
17	306	381	1,100	875	1,150	2,430	2,000	2,010	1,440	765	445	322
18	357	338	1,000	915	1,050	4,550	2,050	2,170	1,440	698	439	355
19	722	352	950	920	932	3,900	1,830	1,910	1,370	614	356	356
20	298	317	1,000	878	816	2,990	2,020	1,690	1,470	684	339	340
21	302	325	950	898	705	2,580	2,600	1,780	1,450	700	415	387
22	286	402	860	820	934	2,790	2,160	1,660	1,280	687	448	361
23	219	371	800	799	782	4,810	2,360	1,460	1,260	559	225	312
24	219	354	750	930	775	3,900	2,490	1,310	1,420	619	378	323
25	298	345	900	994	852	3,120	2,210	1,160	1,560	541	248	351
26	322	365	1,050	890	803	2,570	1,940	1,100	1,470	700	368	311
27	306	373	1,050	815	737	2,410	1,740	988	1,460	610	292	312
28	310	534	1,000	785	914	2,170	1,650	894	1,290	556	352	307
29	257	638	950	760	801	2,030	1,510	875	1,120	519	407	295
30	224	1,230	950	612	-----	2,020	1,400	887	1,240	419	300	280
31	264	-----	1,050	729	-----	1,490	-----	895	-----	506	224	-----
TOTAL	10,140	12,469	30,151	30,431	25,135	72,763	54,400	48,719	49,940	28,052	12,261	9,376
MEAN†	327	402	973	982	813	2,347	1,743	1,572	1,665	905	396	313
MAX	609	1,230	1,500	1,570	1,620	4,810	2,600	2,370	3,200	1,640	577	414
MIN	149	272	581	612	556	833	1,360	875	1,120	419	224	227
(†)	+474	+525	+722	+629	+266	+51.0	+38.0	+25.5	+128	+269	+505	+495
MEAN‡	431	628	1,518	1,354	1,187	3,472	2,959	2,542	2,406	1,062	389	251
CFSM‡	.63	.91	2.21	1.97	1.73	5.05	4.30	3.69	3.50	1.54	.57	.36
IN.‡	.72	1.02	2.54	2.27	1.86	5.82	4.80	4.26	3.90	1.78	.65	.41

CAL YR 1971 TOTAL 239,913 MEAN 655 MAX 2,290 MIN 117 MEAN‡ 938 CFSM‡ 1.36 IN‡ 18.51
WTR YR 1972 TOTAL 383,437 MEAN 1,049 MAX 4,810 MIN 149 MEAN‡ 1,518 CFSM‡ 2.21 IN‡ 30.04

† Diversions, in cubic feet per second, from Ware and Swift River basins for supply of Boston metropolitan district, Chicopee, and South Hadley, and from Ludlow Reservoir for city of Springfield.

‡ Adjusted for diversions and for change in contents in Quabbin Reservoir (adjusted for diversion from Ware River) and Barre Falls, Conant Brook, and Ludlow Reservoirs.

NOTE.--No gage-height record Dec. 3 to Jan. 3.

CONNECTICUT RIVER BASIN

197

01179500 Westfield River at Knightville, Mass.

--Lat 42°17'16", long 72°51'53", Hampshire County, on left bank at Knightville, 0.2 mile downstream from Knightville Dam, 0.2 mile stream from Sykes Brook, 2.4 miles upstream from Middle Branch, 3.5 miles north of Huntington, and at mile 29.7.

WAGE AREA.--162 sq mi.

PERIOD OF RECORD.--August 1909 to current year.

GAGE.--Water-stage recorder. Concrete control since Dec. 20, 1940. Datum of gage is 461.25 ft above mean sea level (level by Corps of Engineers).

Prior to Jan. 11, 1935, nonrecording gage at site 0.5 mile upstream at different datum. Jan. 11, 1935, to May 20, 1940, water-stage recorder at site 700 ft upstream at datum 10.57 ft higher. May 21 to Dec. 19, 1940, nonrecording gage at site 700 ft upstream at datum 18.75 ft higher.

AVERAGE DISCHARGE.--63 years, 318 cfs (26.66 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 3,310 cfs Apr. 24 (gage height, 6.00 ft); minimum, 27 cfs Sept. 11-13; minimum daily, 27 cfs Sept. 12. Period of record: Maximum discharge, 37,900 cfs Sept. 21, 1938 (gage height, 29.58 ft, from floodmarks, site and datum then in use), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 24.07 and 29.58 ft; minimum, 0.1 cfs Apr. 3, 1965; minimum daily, 1.1 cfs Apr. 2, 1965. Maximum discharge since construction of Knightville Reservoir in 1941, 6,660 cfs Mar. 21, 1945 (gage height, 7.45 ft).

REMARKS.--Records good. Flow regulated by Knightville Reservoir since 1941 (see p. 207).

REVISIONS (WATER YEARS).--WSP 415: 1909-12. WSP 1001: 1941-43. WSP 1231: 1910, 1912, 1913(M), 1914-15, 1916-19(M), 1921-23(M), 1925-27(M), 1929-33(M), 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	111	321	234	165	204	287	1,080	1,530	1,340	81	61
2	58	240	150	294	165	412	813	1,190	2,210	2,420	75	52
3	55	454	120	492	171	560	1,860	1,390	830	2,050	76	48
4	52	235	159	459	265	675	997	1,180	513	2,160	82	45
5	52	177	165	345	345	640	473	556	926	1,110	70	41
6	54	217	135	215	269	430	432	778	685	732	61	37
7	74	202	527	220	232	305	428	1,020	913	547	60	35
8	73	226	869	238	220	426	380	1,000	620	447	126	33
9	66	102	548	210	200	305	372	1,280	1,030	376	106	32
10	312	163	477	553	185	260	396	1,870	1,200	331	86	30
11	859	251	672	726	175	265	419	2,150	713	308	70	28
12	321	138	932	558	145	265	476	1,120	505	268	62	27
13	214	187	674	443	195	267	719	532	420	261	53	29
14	171	140	451	621	565	270	1,120	456	373	321	51	50
15	153	134	414	557	808	260	1,200	924	328	246	86	64
16	135	172	618	305	572	257	927	1,420	297	206	69	51
17	120	200	981	225	387	502	2,010	1,300	293	244	59	41
18	109	169	664	261	332	1,100	2,610	1,980	252	196	58	40
19	101	155	464	334	243	1,180	2,580	1,260	232	171	58	58
20	96	162	373	316	205	732	1,330	848	347	155	51	80
21	90	151	359	298	240	552	804	1,000	299	151	45	59
22	85	147	355	273	250	632	2,390	700	406	138	41	49
23	82	134	223	264	240	1,350	2,470	538	842	121	39	43
24	81	106	319	269	228	1,450	2,870	444	814	124	38	32
25	123	87	600	279	210	926	2,690	365	1,480	157	45	36
26	177	140	567	315	205	564	2,560	328	2,290	209	50	36
27	141	176	463	302	205	349	1,640	294	2,220	147	49	35
28	122	172	438	284	203	184	917	260	1,050	116	522	33
29	108	180	463	261	201	154	967	232	493	101	194	31
30	115	373	445	198	-----	166	1,050	206	269	85	109	34
31	124	-----	355	180	-----	173	-----	570	-----	79	77	-----
TOTAL	4,386	5,501	14,300	10,529	7,829	15,815	38,187	28,271	24,384	15,317	2,649	1,276
MEAN	141	183	461	340	270	510	1,273	912	813	494	85.5	42.5
MAX	859	454	981	726	808	1,450	2,870	2,150	2,290	2,420	522	80
MIN	52	87	120	180	145	154	287	206	232	79	38	27
MEAN†	142	183	465	340	270	551	1,229	910	829	479	85.4	42.5
CFSM†	.88	1.13	2.87	2.10	1.67	3.40	7.59	5.62	5.12	2.96	.53	.26
IN.†	1.01	1.26	3.31	2.42	1.80	3.92	8.46	6.48	5.71	3.41	.61	.29

CAL YR 1971 TOTAL 114,182 MEAN 313 MAX 2,280 MIN 22 MEAN† 313 CFSM† 1.93 IN† 26.22
WTP YR 1972 TOTAL 168,444 MEAN 460 MAX 2,870 MIN 27 MEAN† 460 CFSM† 2.84 IN† 38.68

† Adjusted for change in contents in Knightville Reservoir.

CONNECTICUT RIVER BASIN

01180000 Sykes Brook at Knightville, Mass.

LOCATION.--Lat 42°17'27", long 72°52'15", Hampshire County, on right bank 200 ft downstream from bridge on State Highway 112 at Knightville, 0.4 mile upstream from mouth, 0.4 mile west of Knightville Dam, and 3.5 miles north of Huntington.

DRAINAGE AREA.--1.64 sq mi.

PERIOD OF RECORD.--June 1945 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 641.40 ft above mean sea level.

AVERAGE DISCHARGE.--27 years, 2.53 cfs (20.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 53 cfs June 30 (gage height, 2.38 ft); minimum, 0.19 cfs Sept. 3, 4, 5, 6, 7, 8.

Period of record: Maximum discharge, 680 cfs Aug. 19, 1955 (gage height, 4.485 ft), from rating curve extended above 80 cfs; minimum, 0.01 cfs July 28, 1970 (caused by unusual regulation).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.44	3.0	2.3	1.2	2.6	1.7	3.9	2.0	17	.83	.28
2	.24	1.1	2.3	5.2	1.2	4.2	1.8	4.5	7.3	9.8	.77	1.6
3	.27	1.3	1.9	3.4	1.3	9.1	6.8	4.5	4.9	8.2	.87	.22
4	.25	1.2	1.6	2.4	1.0	5.9	5.0	9.5	3.7	1.0	.81	.20
5	.23	.95	1.4	2.6	3.0	4.2	4.9	7.1	7.0	6.4	.69	.20
6	.25	.89	2.3	2.0	2.0	3.8	4.7	5.1	4.4	5.2	.63	.20
7	.25	1.1	3.4	1.9	1.9	3.4	4.5	4.2	4.4	3.4	.64	.20
8	.22	.45	3.8	2.8	1.7	3.0	4.2	6.0	3.6	3.3	.63	.20
9	.22	.89	3.2	3.0	1.6	2.4	4.1	1.2	6.4	2.9	.53	.20
10	3.2	.89	3.6	6.7	1.5	2.6	4.4	7.5	13	2.5	.49	.20
11	3.2	.89	6.9	4.1	1.4	2.8	4.5	5.7	6.3	2.3	.43	.20
12	1.7	.83	3.6	3.6	1.3	2.4	5.6	4.4	4.5	2.0	.43	.20
13	1.3	.73	4.1	3.5	7.8	2.6	8.9	3.9	3.7	2.6	.41	.23
14	.45	.73	3.4	4.9	11	2.5	13	3.5	3.3	2.6	.74	.25
15	.23	.78	3.8	3.8	5.5	2.4	10	9.9	2.9	2.4	.63	.22
16	.73	1.0	6.6	3.4	4.7	2.4	10	11	2.7	2.0	.46	.22
17	.20	1.0	7.2	2.6	3.2	13	14	7.6	2.6	2.0	.46	.22
18	.49	.95	4.6	2.0	2.9	14	17	7.1	2.2	1.7	.44	.23
19	.43	.95	3.8	2.0	3.5	8.9	17	5.4	2.2	1.6	.40	.48
20	.43	.95	3.2	2.0	3.0	6.2	31	6.2	3.4	1.4	.35	.30
21	.46	.95	2.4	1.9	2.0	5.2	20	6.3	2.8	1.3	.34	.27
22	.43	.95	2.6	1.9	2.2	16	14	4.5	4.6	1.3	.33	.29
23	.43	.93	2.2	1.9	1.9	18	16	3.7	9.2	1.1	.32	.28
24	.49	.95	3.0	2.0	2.3	11	13	3.1	23	1.3	.34	.29
25	1.0	1.7	4.6	3.6	1.9	8.3	9.8	2.7	13	1.7	.33	.29
26	1.0	1.6	3.4	2.5	1.9	6.9	5.1	2.4	14	1.5	.32	.29
27	.83	1.2	3.4	2.0	1.6	5.9	4.1	2.2	8.8	1.2	.45	.30
28	.76	1.3	4.1	1.6	1.6	5.5	4.2	1.9	6.0	1.2	.56	.31
29	.73	2.0	3.6	1.7	1.8	6.8	4.1	1.7	4.6	1.0	.33	.32
30	.64	5.2	3.2	1.5	-----	6.7	4.1	1.7	23	1.3	.30	.40
31	.64	-----	2.8	1.4	-----	5.5	-----	9.8	-----	.56	.28	-----
TOTAL	23.54	35.45	110.7	86.6	87.3	195.2	283.9	170.3	218.3	103.46	15.54	9.09
MEAN	.75	1.15	3.57	2.79	3.01	6.30	9.46	5.49	7.28	3.34	.50	.30
MAX	3.2	7.2	6.9	6.2	11	16	31	12	23	17	.87	1.6
MIN	.22	.64	1.4	1.4	1.2	2.4	4.1	1.7	2.2	.56	.28	.20
CFSM	.46	.72	2.18	1.70	1.84	3.84	5.77	3.35	4.44	2.04	.30	.17
IN	.53	.80	2.51	1.96	1.99	4.43	6.44	3.86	4.95	2.35	.35	.2

CAL YR 1971 TOTAL 896.75 MEAN 2.44 MAX 20 MIN .13 CFSM 1.50 IN 20.34
 WTR YR 1972 TOTAL 1,339.34 MEAN 3.66 MAX 31 MIN .20 CFSM 2.23 IN 30.34

PEAK DISCHARGE (BASE, 35 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1315	2.33	46				
6-1	0200	2.32	45				
6-24	0800	2.26	38				
6-30	1400	2.38	53				

CONNECTICUT RIVER BASIN

199

01180500 Middle Branch Westfield River at Goss Heights, Mass.

LOCATION.--Lat 42°15'31", long 72°52'23", Hampshire County, on right bank at upstream side of highway bridge at Goss Heights, 0.3 mile upstream from mouth, 0.7 mile downstream from Littleville Dam, and 1.7 miles north of Huntington.

DRAINAGE AREA.--52.6 sq mi.

PERIOD OF RECORD.--July 1910 to current year.

GAGE.--Water-stage recorder. Datum of gage is 399.30 ft above mean sea level. Prior to June 25, 1930, datum was 2.00 ft higher, and June 25, 1930, to Sept. 30, 1964, datum was 1.00 ft higher. Prior to Sept. 8, 1912, nonrecording gage at same site.

AVERAGE DISCHARGE.--62 years, 102 cfs (26.33 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,360 cfs Apr. 25 (gage height, 5.05 ft); minimum, 3.0 cfs July 12; minimum daily, 5.9 cfs Sept. 12. Period of record: Maximum discharge, 19,900 cfs Sept. 21, 1938 (gage height, 11.61 ft, present datum), from rating curve extended above 3,200 cfs on basis of mean of two contracted-opening measurements of peak flow; maximum gage height, 14.87 ft, present datum, Mar. 12, 1936 (ice jam); practically no flow Sept. 3, 22, Oct. 20, 1910, July 30, 1912, Oct. 26, 27, 1914. Maximum discharge since construction of Littleville Dam in 1965, 1,360 cfs Apr. 25, 1972 (gage height, 5.05 ft).

REMARKS.--Records good. Some diurnal fluctuation at low flow prior to 1952 caused by mill above station. Flow regulated by Littleville Lake (see p. 207) since 1965.

REVISIONS (WATER YEARS).--WSP 415: 1910-13. WSP 781: 1933(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	32	166	163	57	80	166	262	405	505	38	28
2	15	40	79	99	56	124	225	264	630	840	28	18
3	14	105	62	143	60	256	267	311	415	840	28	14
4	12	40	65	138	80	237	181	368	280	857	29	12
5	12	26	54	120	100	164	155	168	281	665	25	10
6	12	103	52	97	90	126	141	299	281	340	21	9.1
7	12	83	168	86	80	114	139	378	246	220	26	8.2
8	12	64	287	86	70	111	123	249	266	166	25	7.7
9	11	18	217	77	62	105	116	270	252	132	27	7.4
10	51	36	182	153	57	94	118	464	415	113	24	6.5
11	256	82	305	203	55	90	126	616	306	102	21	6.4
12	169	73	358	200	54	90	133	404	203	42	18	5.9
13	101	100	262	166	63	90	191	136	151	32	17	6.2
14	70	71	190	230	169	90	334	83	128	49	14	9.3
15	55	53	162	200	174	89	409	234	138	69	25	10
16	46	52	268	140	153	98	357	556	96	61	24	10
17	40	56	403	100	110	305	541	637	90	63	21	9.2
18	35	55	274	60	106	407	504	448	80	61	19	8.7
19	31	52	172	94	104	283	846	301	73	55	18	13
20	29	50	139	96	94	202	526	236	90	50	16	13
21	28	48	126	90	80	164	178	282	95	47	14	11
22	28	46	112	82	75	340	897	230	114	46	12	11
23	25	42	85	78	69	481	789	174	267	41	11	9.1
24	25	37	96	80	72	446	1,110	140	358	39	11	8.0
25	33	45	210	95	69	294	1,240	116	403	43	11	7.6
26	49	43	187	120	71	212	1,140	99	776	99	11	7.5
27	50	46	161	95	67	174	734	87	1,020	74	11	7.6
28	45	50	157	80	56	152	348	79	964	57	35	6.9
29	40	53	173	78	65	154	273	69	745	44	46	6.4
30	36	43	144	53	-----	186	270	61	236	36	36	7.5
31	34	-----	129	60	-----	165	-----	141	-----	31	27	-----
TOTAL	1,391	1,761	5,432	3,528	2,637	5,926	12,606	8,162	9,613	5,844	679	284.2
MEAN	44.9	56.7	175	114	84.9	191	420	263	321	189	21.9	9.67
MAX	256	105	403	230	174	481	1,240	637	1,020	857	46	20
MIN	11	18	52	60	54	80	116	61	73	31	11	5.9
MEANT	45.8	58.2	177	111	83.5	195	423	266	351	150	21.4	8.47
CFSMT	.87	1.11	3.37	2.11	1.59	3.71	8.04	5.06	6.67	2.85	.41	.16
IN.†	1.00	1.23	3.88	2.44	1.71	4.28	8.97	5.84	7.44	3.28	.47	.18

CAL YR 1971 TOTAL 37,214.1 MEAN 102 MAX 772 MIN 2.8 MEANT 102 CFSMT 1.94 INT 26.39
 4TH YR 1972 TOTAL 57,603.2 MEAN 157 MAX 1,240 MIN 4.4 MEANT 157 CFSMT 2.98 INT 40.73

† Adjusted for change in contents in Littleville Lake.
 NOTE.--No gage-height record Jan. 12 to Feb. 9.

CONNECTICUT RIVER BASIN

01180800 Walker Brook near Becket Center, Mass.

LOCATION.--Lat 42°15'49", long 73°02'48", Berkshire County, on right bank 20 ft upstream from culvert on U. S. Highway 20, 0.2 mile east of Bonny Rigg Corners, 1.7 miles southeast of Becket Center, and 3.5 miles west of Chester.

DRAINAGE AREA.--3.01 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1962. November 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,280 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 5.91 cfs (26.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 299 cfs June 30 (gage height, 6.56 ft), from rating curve extended above 93 cfs; minimum, 0.34 cfs Sept. 11-13.

Period of record: Maximum discharge, 299 cfs June 30, 1972 (gage height, 6.56 ft), from rating curve extended above 93 cfs; minimum, 0.14 cfs Sept. 11, 1963, Aug. 24, 1965.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Recording rain gage at station since May 1963 (no winter records). Records of chemical analyses and water temperature for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.0	7.8	4.8	2.7	6.0	12	16	55	40	1.4	.69
2	1.3	7.2	5.4	6.0	2.6	9.7	13	16	20	20	1.3	.58
3	1.4	7.8	4.2	12	3.3	17	11	18	12	44	1.3	.58
4	1.4	6.7	4.2	6.6	8.6	13	9.4	32	8.9	47	1.7	.54
5	1.4	4.3	3.4	5.8	5.8	8.3	8.1	24	6.9	22	1.3	.46
6	1.2	3.6	4.7	5.6	4.2	6.7	7.5	16	7.5	17	1.1	.43
7	1.5	6.0	34	7.0	3.8	5.8	7.2	12	12	12	.96	.43
8	1.5	5.0	23	5.4	3.3	6.5	6.5	15	9.1	9.7	1.6	.43
9	1.2	4.4	13	5.0	3.1	5.4	6.3	29	17	7.7	.95	.43
10	27	3.9	17	16	2.9	4.7	6.7	19	34	8.1	.95	.40
11	25	3.5	25	10	2.6	4.3	7.5	14	16	5.2	.74	.34
12	11	3.1	15	9.2	2.6	4.5	10	11	10	4.7	.63	.34
13	9.0	3.0	11	8.6	6.3	4.9	17	9.1	8.3	6.1	.58	.46
14	3.7	2.9	9.0	18	18	4.7	27	8.6	7.5	7.7	.80	.74
15	3.2	3.3	8.0	9.0	10	5.6	21	22	6.5	5.4	1.4	.63
16	2.9	7.0	25	5.0	8.3	4.7	26	48	5.8	4.2	.87	.50
17	2.6	6.0	18	4.5	5.4	22	60	25	5.6	6.1	.74	.46
18	2.4	4.5	10	5.6	4.7	30	59	18	5.2	4.0	.74	.46
19	2.3	4.0	7.0	6.6	4.0	17	64	14	4.3	4.4	.74	.46
20	2.2	4.2	6.4	5.4	3.5	10	79	16	4.7	3.4	.58	.69
21	2.1	3.8	6.0	4.9	4.0	8.6	35	18	4.3	3.2	.54	.50
22	2.0	3.8	5.2	4.3	4.0	22	26	13	20	3.4	.54	.50
23	1.9	3.4	4.5	4.3	3.4	34	43	9.4	64	2.4	.50	.50
24	1.9	3.6	9.0	5.6	3.4	19	42	7.8	78	2.0	.50	.46
25	4.6	3.3	18	11	3.4	13	32	6.3	36	3.8	.63	.46
26	3.8	4.9	8.5	7.0	3.3	10	25	5.4	32	9.4	.54	.46
27	3.1	4.2	8.0	4.5	3.1	8.9	20	4.7	20	2.6	1.2	.46
28	2.9	3.6	9.2	4.0	3.1	8.1	17	4.0	13	1.9	6.6	.43
29	2.5	3.8	8.5	4.0	3.3	10	16	3.6	10	1.6	2.8	.43
30	2.4	11	7.0	3.6	-----	11	16	3.1	101	1.4	1.3	1.2
31	2.0	-----	6.0	3.1	-----	8.6	-----	28	-----	1.3	.95	-----
TOTAL	128.9	137.1	341.0	212.4	136.7	344.0	730.2	486.0	636.6	309.7	36.48	15.86
MEAN	4.16	4.57	11.0	6.85	4.71	11.1	24.3	15.7	21.2	9.99	1.18	.53
MAX	27	11	34	18	18	34	79	48	101	47	6.6	1.2
MIN	1.2	2.0	3.4	3.1	2.6	4.3	6.3	3.1	4.3	1.3	.50	.34
CFSM	1.38	1.52	3.65	2.28	1.56	3.69	8.07	5.22	7.04	3.32	.39	.18
IN.	1.59	1.69	4.21	2.63	1.69	4.25	9.02	6.01	7.87	3.83	.45	.20

CAL YR 1971 TOTAL 2,300.36 MEAN 6.30 MAX 53 MIN .23 CFSM 2.09 IN 28.43
MTR YR 1972 TOTAL 3,514.94 MEAN 9.60 MAX 101 MIN .34 CFSM 3.19 IN 43.44

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1230	5.23	143	6-23	1345	5.06	127
5-16	0615	4.56	85	6-30	1215	6.56	299
6-1	0415	4.72	98	7-3	2100	5.19	139

NOTE.--No gage-height record Dec. 11 to Jan. 25.

CONNECTICUT RIVER BASIN

201

01181000 West Branch Westfield River at Huntington, Mass.

LOCATION.--Lat 42°14'14", long 72°53'46", Hampshire County, on left bank at Huntington, 0.4 mile downstream from Roaring Brook and 1.5 miles upstream from mouth.

DRAINAGE AREA.--93.7 sq mi.

PERIOD OF RECORD.--September 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 388.60 ft above mean sea level.

AVERAGE DISCHARGE.--37 years, 182 cfs (26.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,400 cfs June 30 (gage height, 9.08 ft); minimum, 15 cfs Sept. 29, 30.

Period of record: Maximum discharge, 26,100 cfs Aug. 19, 1935 (gage height, 15.27 ft), from rating curve extended above 9,500 cfs on basis of slope-area measurement of peak flow; minimum, 3.3 cfs Aug. 9, 1953, Nov. 27, 1957.

REMARKS.--Records good. Prior to 1950, some diurnal fluctuation at low flow caused by small mill above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	63	220	177	128	130	331	369	1,600	1,600	62	30
2	48	124	150	212	124	269	424	396	520	760	59	29
3	47	197	139	349	104	501	330	462	319	1,060	61	29
4	46	144	144	236	204	411	287	1,480	242	1,380	65	26
5	45	113	113	212	244	272	253	754	354	635	51	23
6	45	109	129	212	204	239	237	480	236	466	45	21
7	47	134	775	240	180	213	237	377	319	350	44	20
8	42	156	584	194	149	199	211	407	235	273	66	20
9	39	134	349	190	149	198	203	921	440	217	55	19
10	400	124	394	506	139	179	212	544	806	186	45	18
11	620	115	683	377	127	169	228	401	402	177	39	18
12	216	100	618	322	116	150	262	326	271	156	37	19
13	140	94	406	272	160	162	447	275	222	163	34	23
14	110	89	312	577	539	152	749	244	194	195	35	37
15	96	86	301	307	321	153	627	603	170	148	76	39
16	84	127	728	167	261	152	681	1,310	157	125	48	28
17	78	136	625	147	175	548	1,680	655	154	148	38	22
18	73	115	377	173	140	836	1,500	528	134	113	37	19
19	68	104	249	194	115	481	1,850	396	128	106	35	22
20	64	109	240	170	140	322	3,260	414	160	96	31	29
21	61	100	224	161	140	267	1,410	501	137	94	26	22
22	59	98	197	147	140	659	921	356	322	106	24	21
23	58	91	161	147	140	1,090	1,440	280	2,200	86	22	19
24	58	94	307	150	140	597	1,100	231	3,220	88	21	18
25	98	94	532	258	125	402	832	197	1,290	110	21	18
26	115	117	307	196	119	322	651	172	1,200	268	21	17
27	93	107	291	134	115	280	513	156	676	117	21	20
28	81	109	349	139	112	254	433	138	446	86	117	16
29	75	117	317	138	112	283	412	124	332	71	64	15
30	68	296	249	138	-----	342	391	112	3,640	62	42	16
31	65	-----	224	144	-----	272	-----	599	-----	58	32	-----
TOTAL	3,188	3,596	10,594	6,986	4,862	10,510	22,112	14,210	20,526	9,520	1,374	677
MEAN	103	120	351	225	166	339	737	458	684	307	44.3	22.6
MAX	620	296	883	577	539	1,090	3,260	1,480	3,640	1,600	117	39
MIN	39	63	113	134	104	136	203	112	128	58	21	15
CFSM	1.10	1.28	3.75	2.40	1.79	3.62	7.87	4.89	7.30	3.28	.47	.24
IN.	1.27	1.43	4.33	2.77	1.93	4.17	8.78	5.64	8.15	3.78	.55	.27

CAL YR 1971 TOTAL 71,883.3 MEAN 197 MAX 1,550 MIN 9.3 CFSM 2.10 IN 28.54
WTR YR 1972 TOTAL 108,455.0 MEAN 296 MAX 3,640 MIN 15 CFSM 3.16 IN 43.06

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1415	6.73	5,210	6-23	1615	6.80	5,320
6-1	0615	4.91	2,780	6-30	1315	9.08	9,400

CONNECTICUT RIVER BASIN

01183000 Westfield Little River at outlet of Cobble Mountain Reservoir,
near Westfield, Mass.

LOCATION.--Lat 42°07'34", long 72°53'37", Hampden County, at Cobble Mountain Dam, 7.5 miles west of Westfield, and at mile 13.0 (revised).

DRAINAGE AREA.--45.8 sq mi.

PERIOD OF RECORD.--July 1905 to current year. Published as "near Blandford" 1905-11 and as "near Westfield" 1912-35.

GAGE.--Venturi meters at outlet tunnel at powerhouse 2.4 miles downstream. Prior to Mar. 1, 1910, nonrecording gage at site 0.2 mile upstream and Mar. 1, 1910, to Sept. 30, 1935, water-stage recorder at diversion dam 2.8 miles downstream.

AVERAGE DISCHARGE.--62 years (1910-72), 88.4 cfs (26.21 inches per year), adjusted to present drainage area.

REMARKS.--Discharge computed on basis of flow through venturi meters and flow over reservoir spillway or through bypass tunnel. Flow regulated by Borden Brook Reservoir since 1910 and Cobble Mountain Reservoir since August 1931 (see p. 207); discharge adjusted for effect of this regulation. No flow over spillway or through bypass tunnel during year.

COOPERATION.--Records furnished by Springfield Board of Water Commissioners.

REVISIONS.--WSP 501: Drainage area.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Month	Mean	Per square mile	Runoff in inches
October	42.5	0.93	1.07
November	55.8	1.22	1.36
December	170	3.71	4.28
Calendar year 1971	89.0	1.94	26.39
January	96.8	2.16	2.49
February	114	2.49	2.69
March	161	3.52	4.06
April	338	7.38	8.24
May	172	3.76	4.34
June	311	6.79	7.58
July	113	2.47	2.84
August	9.74	.21	.25
September	5.87	.13	.14
Water year 1971-72	132	2.88	39.33

CONNECTICUT RIVER BASIN

203

0183500 Westfield River near Westfield, Mass.

LOCATION.--Lat 42°06'24", long 72°41'58", Hampden County, on left bank 0.7 mile downstream from Great Brook, 3 miles east of Westfield, and 8.1 miles upstream from mouth.

DRAINAGE AREA.--497 sq mi.

PERIOD OF RECORD.--June 1914 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.25 ft above mean sea level. Prior to Nov. 3, 1933, on right bank at same datum.

AVERAGE DISCHARGE.--58 years, 930 cfs (25.41 inches per year), adjusted for diversion and, since October 1931, for storage.

EXTREMES.--Current year: Maximum discharge, 12,100 cfs June 30 (gage height, 13.47 ft); minimum, 106 cfs Oct. 5, Sept. 11; minimum daily, 135 cfs Sept. 11.

Period of record: Maximum discharge, 70,300 cfs Aug. 19, 1955 (gage height, 34.2 ft, from floodmarks), from rating curve extended above 18,000 cfs on basis of computations of flow over dam at gage heights 27.20, 29.40, and 34.2 ft; minimum, 9 cfs Oct. 2, 1921; minimum daily, 40 cfs Dec. 28, 29, 1914.

REMARKS.--Records excellent. Flow regulated by Borden Brook Reservoir, Cobble Mountain Reservoir since 1931, Knightville Reservoir since 1941, and Littleville Lake since 1965 (see p. 207). High flow slightly affected by retarding reservoirs since 1963. Diversion above station from Westfield Little River for municipal supply of Springfield. See table below for figures of diversion. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 601: 1924(M). WSP 756: Drainage area. WSP 1051: 1919-21(M), 1925(M). WSP 1231: 1915-16(M), 1920.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	306	1,110	790	754	690	1,180	2,100	4,450	7,900	478	346
2	188	320	715	772	685	1,250	1,800	2,120	4,400	4,940	443	239
3	177	940	478	1,260	540	2,390	2,710	2,520	2,860	4,750	446	228
4	220	665	535	1,220	991	2,170	2,360	3,700	1,460	6,450	450	185
5	193	399	474	1,180	1,010	1,730	1,400	2,600	2,130	4,510	399	207
6	373	522	454	922	802	1,640	1,300	1,450	1,880	3,330	313	167
7	216	466	1,300	838	690	1,140	1,310	2,150	1,920	2,190	420	167
8	191	660	2,220	784	605	1,200	1,160	2,240	1,750	1,530	490	162
9	270	399	1,520	645	610	1,120	1,090	3,130	2,000	1,270	522	164
10	585	402	1,360	1,380	549	856	1,150	3,420	3,570	1,190	474	164
11	2,230	600	2,050	1,860	517	838	1,190	3,630	2,240	1,180	443	135
12	1,230	341	2,530	1,700	478	826	1,230	2,910	1,700	1,120	283	145
13	814	450	1,930	1,100	705	874	1,770	1,520	1,370	1,060	258	157
14	526	413	1,500	1,910	1,940	862	2,750	1,200	1,270	1,320	389	196
15	417	377	1,380	1,030	1,910	886	3,030	2,370	1,120	907	450	222
16	301	454	1,900	1,080	1,560	940	2,300	4,020	1,030	750	950	205
17	331	504	2,670	950	1,140	2,160	4,380	3,400	985	1,010	350	193
18	352	478	1,940	900	1,080	3,940	5,290	3,620	799	882	470	164
19	295	428	1,360	1,010	832	3,170	5,590	2,930	961	715	313	207
20	264	395	1,190	1,050	695	2,200	5,950	2,060	1,080	694	254	239
21	250	406	1,150	1,020	710	1,850	4,220	2,540	1,180	636	381	213
22	258	446	1,110	874	832	2,580	4,910	2,210	2,070	567	466	199
23	236	377	922	754	754	4,890	5,590	1,650	3,260	568	466	175
24	245	327	910	820	650	4,070	6,350	1,400	6,180	552	352	164
25	377	334	1,090	1,050	790	2,820	5,510	1,140	4,710	543	435	167
26	402	402	1,440	1,210	635	1,850	5,070	975	5,270	856	345	167
27	443	432	1,310	1,010	610	1,610	3,740	471	4,440	642	213	169
28	370	482	1,400	904	772	1,220	2,540	785	3,420	506	605	157
29	306	590	1,400	754	705	1,100	2,110	724	2,410	435	600	159
30	296	1,240	1,190	615	-----	1,300	2,180	688	5,980	384	450	169
31	310	-----	1,040	635	-----	1,150	-----	1,000	-----	395	377	-----
TOTAL	13,044	14,555	42,178	32,977	24,751	55,294	92,180	88,123	79,115	53,870	12,856	5,633
MEAN	421	465	1,361	1,064	853	1,784	3,073	2,194	2,604	1,738	415	188
MAX	2,230	1,240	2,670	1,910	1,940	4,890	6,950	4,020	6,180	7,900	680	348
MIN	177	306	454	615	474	690	1,090	688	799	384	213	135
(1)	59.7	48.7	44.2	42.9	44.9	45.1	46.1	58.3	59.1	67.3	73.7	70.5
MEAN‡	449	549	1,496	1,053	924	1,878	3,262	2,259	2,742	1,612	305	198
CFSM‡	.90	1.10	3.01	2.12	1.86	3.78	6.56	4.55	5.52	3.24	.61	.40
IN‡	1.04	1.23	3.47	2.44	2.01	4.36	7.32	5.24	6.16	3.74	.71	.44

CAL YR 1971 TOTAL 311,204 MEAN 853 MAX 5,350 MIN 76 MEAN‡ 930 CFSM‡ 1.87 IN‡ 25.40
WTR YR 1972 TOTAL 493,574 MEAN 1,349 MAX 7,000 MIN 135 MEAN‡ 1,393 CFSM‡ 2.80 IN‡ 38.17

† Diversion, in cubic feet per second, from Westfield Little River for municipal supply of Springfield.

‡ Adjusted for diversion and for change in contents in Borden Brook, Cobble Mountain, and Knightville Reservoirs and Littleville Lake.

CONNECTICUT RIVER BASIN

204

01184000 Connecticut River at Thompsonville, Conn.

(International Hydrological Decade River Station)

LOCATION.--Lat 41°59'14", long 72°36'21", Hartford County, on right bank just upstream from Enfield Dam, 1 mile downstream from Thompsonville, 3 miles downstream from Massachusetts-Connecticut State line, and at mile 68.2.

DRAINAGE AREA.--9,661 sq mi.

PERIOD OF RECORD.--July 1928 to current year.

GAGE.--Water-stage recorder on river and on canal of Connecticut Light and Power Co. Datum of gage is 38.48 ft above mean sea level.

AVERAGE DISCHARGE.--44 years, 16,020 cfs (22.52 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 90,900 cfs May 6 (gage height, 6.55 ft); minimum daily, 2,680 cfs Oct. 31.
Period of record: Maximum discharge, 282,000 cfs Mar. 20, 1936 (gage height, 16.6 ft, from floodmarks); minimum daily, 968 cfs Oct. 20, 1960.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Discharge includes water diverted around station by canal of Connecticut Light & Power Co. Flow regulated by powerplants, by diversion from Chicopee River basin (see table below), and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, Quabbin Reservoir (see p. 207), and other reservoirs (combined usable capacity, about 107 billion cubic feet). Records of chemical analyses and water temperatures for the current year for this station and for station 01183750 (Connecticut River at Agawam, Mass.), 4.5 miles upstream, are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 741: 1932. WSP 891: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,040	3,590	13,300	10,200	9,200	11,000	26,200	51,400	27,700	31,800	10,200	9,050
2	3,710	6,240	9,200	6,830	9,250	14,500	28,000	57,400	34,500	26,800	9,220	5,610
3	2,740	8,690	8,310	10,200	9,700	18,500	31,600	67,600	31,500	20,900	8,160	4,690
4	3,040	7,900	6,900	12,700	9,810	20,500	29,700	78,800	26,000	28,100	9,520	2,770
5	6,810	6,880	5,470	13,500	10,400	19,400	28,500	88,500	26,400	24,900	8,960	2,880
6	5,290	4,470	6,440	11,400	8,410	17,500	26,500	89,500	25,000	21,800	8,600	3,370
7	5,000	4,020	8,410	9,950	8,500	16,500	24,700	85,300	21,000	19,300	6,930	4,360
8	6,030	6,100	12,700	9,090	10,100	15,500	24,000	84,900	21,400	16,900	8,320	3,680
9	4,550	7,730	11,200	7,550	10,100	14,000	22,000	85,600	21,400	14,200	8,810	3,930
10	5,190	8,150	12,000	9,490	10,500	15,000	19,600	84,900	25,900	11,300	7,670	3,250
11	11,800	7,890	13,300	12,900	10,500	14,400	14,400	79,300	25,100	11,700	7,300	2,930
12	13,000	7,650	16,800	14,300	7,440	12,100	10,900	70,300	27,400	15,200	8,860	2,950
13	10,530	6,700	15,900	13,500	6,410	12,400	24,100	57,400	20,100	17,600	6,230	3,990
14	8,940	7,970	17,300	14,700	9,450	11,400	33,900	50,100	14,700	17,200	5,520	4,680
15	7,920	5,750	14,100	14,800	13,400	10,600	39,700	43,100	16,900	15,500	5,850	5,450
16	6,750	5,390	14,300	17,300	13,500	13,900	36,900	46,100	16,400	10,800	7,160	5,040
17	3,890	5,430	14,000	11,700	17,500	18,200	42,500	42,200	16,600	7,800	6,100	3,380
18	3,490	5,630	19,500	11,400	12,500	35,600	57,700	57,700	15,400	11,200	6,540	2,930
19	5,410	5,030	16,600	17,100	17,900	35,100	68,000	58,400	12,300	12,000	6,340	4,090
20	5,860	5,960	12,900	13,800	10,400	34,800	79,000	49,900	13,500	12,100	3,570	5,170
21	6,760	5,510	12,800	13,900	8,500	30,600	87,900	45,100	15,900	11,100	4,790	5,060
22	4,780	5,980	12,800	12,800	8,720	30,000	76,500	41,200	16,300	10,100	6,110	3,260
23	4,590	8,570	11,200	12,200	8,490	44,900	72,600	37,100	16,100	11,400	5,930	3,730
24	4,590	7,820	10,300	9,590	8,510	50,600	72,800	26,600	19,200	14,400	4,860	3,300
25	6,280	4,950	11,600	10,200	9,320	45,480	72,000	21,900	25,000	16,500	5,130	2,880
26	6,980	5,120	13,100	12,600	5,450	39,400	70,800	19,500	26,100	15,300	5,720	3,770
27	8,100	4,090	12,700	13,700	8,350	34,100	56,300	18,200	28,800	16,800	3,840	3,660
28	7,730	5,380	13,900	12,000	8,990	29,500	57,800	15,200	25,400	14,500	6,030	3,840
29	8,050	6,330	14,800	11,100	9,530	26,000	50,000	11,500	15,400	12,500	11,000	4,060
30	6,450	10,700	15,000	9,440	-----	26,000	48,500	10,700	21,200	11,900	9,330	3,760
31	2,680	-----	15,200	7,990	-----	26,500	-----	11,500	-----	10,600	8,120	-----
TOTAL	100,070	187,140	390,130	356,930	281,940	739,000	1,355,000	1,597,200	652,900	496,400	219,570	117,520
MEAN	6,111	6,238	12,880	11,510	9,723	23,840	45,700	51,520	21,740	16,010	7,083	3,917
MAX	13,400	10,700	19,500	14,900	13,500	50,600	87,900	89,500	34,500	31,800	11,000	5,610
MIN	2,680	2,970	5,970	6,830	6,410	10,600	18,400	10,700	12,300	7,800	3,570	2,770
(7)	453	499	693	12.5	236	20.2	8.97	0	102	246	480	472
MEAN†	5,426	5,844	13,140	11,190	8,644	23,700	48,060	56,660	22,700	15,970	5,939	2,921
CFSM†	.56	.60	1.36	1.16	.89	2.45	4.97	5.86	2.35	1.65	.61	.30
INF†	.65	.68	1.57	1.34	.97	2.83	5.55	6.76	2.62	1.91	.71	.34

CAL YR 1971 TOTAL 4,874,460 MEAN 13,350 MAX 76,600 MIN 1,620 MEAN‡ 13,630 CFSM‡ 1.41 INF 19.15
WTR YR 1972 TOTAL 6,593,720 MEAN 19,020 MAX 89,900 MIN 2,680 MEAN‡ 18,390 CFSM‡ 1.90 INF 25.91

M Expressed in thousands.

† Diversion, in cubic feet per second, from Chicopee River basin to Wachusett Reservoir.

‡ Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to Borden Brook and Cobble Mountain Reservoirs listed on p. 207 and for diversion from Chicopee River basin.

NOTE.--No gage-height record Feb. 5 to Mar. 10.

CONNECTICUT RIVER BASIN

205

01185100 Fall River below Otis Reservoir, near Otis, Mass.

LOCATION.--Lat 42°09'42", long 73°03'48", Berkshire County, on right bank 0.4 mile downstream from Otis Reservoir, 0.5 mile upstream from mouth, and 2.6 miles southeast of Otis.

DRAINAGE AREA.--16.5 sq mi.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,260 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 422 cfs July 2 (gage height, 5.41 ft); minimum daily, 1.1 cfs Sept. 17.

Period of record: Maximum discharge, 422 cfs July 2, 1972 (gage height, 5.41 ft); minimum daily, 1.1 cfs July 17, 18, 21-25, 1971, Sept. 17, 1972.

REMARKS.--Records fair prior to April and good thereafter. Flow regulated by Otis Reservoir (see p. 207).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	5.0	3.9	3.0	15	77	160	5.2	278	330	2.0	1.4
2	13	5.8	3.7	3.2	15	110	170	5.0	102	270	2.0	1.4
3	13	6.0	3.5	3.5	15	110	45	5.3	5.5	243	2.1	1.4
4	56	5.6	3.3	32	15	110	5.5	6.9	4.1	306	3.1	1.4
5	96	4.5	3.2	60	15	58	5.3	6.9	112	101	2.6	1.4
6	96	3.9	3.1	60	15	7.0	5.5	5.8	134	6.5	2.3	1.4
7	96	4.5	3.0	60	15	5.0	5.3	5.8	4.9	52	2.4	1.4
8	47	4.0	52	60	15	3.0	5.3	4.7	5.0	167	2.7	1.4
9	47	3.7	67	60	15	3.0	5.0	6.1	33	28	2.7	1.3
10	121	3.4	67	78	15	3.0	4.9	5.6	278	5.0	2.4	1.3
11	134	3.2	67	67	15	3.0	4.4	4.9	110	4.6	2.1	1.3
12	135	3.1	67	67	14	3.0	4.6	4.3	4.6	4.0	2.1	1.3
13	134	3.0	110	67	15	3.0	6.1	3.6	4.0	5.2	2.0	1.5
14	134	3.0	135	67	15	3.0	7.6	3.1	5.0	5.0	2.0	1.7
15	134	3.1	135	67	14	3.0	7.0	5.2	8.1	4.3	2.0	1.6
16	165	3.5	160	67	14	3.0	8.1	10	12	3.9	1.9	1.3
17	210	3.4	165	42	14	3.3	12	8.5	113	3.7	1.9	1.1
18	171	3.3	165	15	14	30	13	6.3	171	3.2	1.9	1.2
19	170	3.1	165	15	14	60	14	5.2	67	3.1	1.8	1.6
20	164	3.0	165	15	14	60	61	39	3.2	2.9	1.8	1.5
21	159	3.0	165	15	14	75	174	100	89	3.1	1.8	1.4
22	167	3.0	165	15	14	87	220	113	276	3.2	1.8	1.4
23	243	3.0	165	15	14	87	267	35	146	3.4	2.2	1.4
24	240	3.0	165	34	14	87	267	3.1	265	3.5	2.0	1.4
25	236	3.0	165	46	14	40	267	2.5	291	2.8	1.7	1.4
26	230	3.0	60	46	14	6.0	247	2.4	334	2.7	1.6	1.3
27	226	3.0	4.5	46	35	5.9	191	2.2	144	2.6	1.6	1.5
28	219	3.0	4.0	34	60	5.8	189	2.1	7.2	2.4	1.6	1.4
29	213	3.3	3.7	16	60	5.7	76	2.0	5.3	2.3	1.4	1.2
30	210	4.0	3.4	15	-----	5.6	5.3	2.5	189	2.2	1.4	1.4
31	65	-----	3.2	15	-----	5.5	-----	131	-----	2.1	1.4	-----
TOTAL	4,470	109.4	2,727.5	1,325.7	532	1,067.8	2,461.7	542.4	3,250.9	1,578.7	62.3	41.7
MEAN	144	3.65	88.0	42.8	18.3	34.4	82.7	17.5	108	50.9	2.01	1.39
MAX	243	6.0	185	87	60	110	267	131	334	330	3.1	1.7
MIN	13	3.0	3.0	3.0	14	3.0	4.4	2.0	3.2	2.1	1.4	1.1

CAL YR 1971 TOTAL 12,684.1 MEAN 34.6 MAX 243 MIN 1.1

WTH YR 1972 TOTAL 18,198.1 MEAN 49.7 MAX 334 MIN 1.1

NOTE.--No gage-height record Nov. 8 to Dec. 20, Jan. 10-27, July 30 to Aug. 7. Stage-discharge relation indefinite Oct. 1 to Nov. 7, Dec. 21 to Jan. 7, Jan. 28 to Apr. 11.

CONNECTICUT RIVER BASIN

01185500 West Branch Farmington River near New Boston, Mass.

LOCATION.--Lat 42°04'45", long 73°04'24", Berkshire County, on left bank 5 ft downstream from highway bridge, 0.3 mile downstream from Clem River, 1 mile south of New Boston, and at mile 65.0.

DRAINAGE AREA.--92.0 sq mi.

PERIOD OF RECORD.--May 1913 to current year. Prior to October 1948, published as Farmington River near New Boston.

GAGE.--Water-stage recorder. Datum of gage is 758.21 ft above mean sea level.

AVERAGE DISCHARGE.--59 years, 178 cfs (26.27 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,590 cfs June 30 (gage height, 6.96 ft); minimum daily, 9.7 cfs Sept. 13.
Period of record: Maximum discharge, 34,300 cfs Aug. 19, 1955 (gage height, 14.06 ft), from rating curve extended above 9,600 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.4 cfs Aug. 20, 21, 1957.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Otis Reservoir 7.0 miles upstream on Fall River (see p. 207). High flow slightly affected by retarding reservoirs since 1966.

REVISIONS (WATER YEARS).--WSP 641: 1924(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1914.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	57	215	155	100	170	388	305	1,120	1,190	44	23
2	78	87	162	188	100	280	491	301	612	802	40	22
3	82	106	140	261	100	440	312	339	321	923	40	21
4	112	102	125	214	175	413	219	605	238	1,220	62	20
5	156	87	120	231	200	310	192	556	352	723	43	18
6	148	76	156	200	180	203	179	407	338	450	36	16
7	146	99	576	195	160	178	180	312	228	361	35	14
8	127	106	603	177	135	155	162	301	192	421	50	13
9	120	87	457	191	130	143	154	516	225	229	39	13
10	345	80	433	438	125	129	154	434	776	168	34	12
11	545	78	636	384	110	123	160	336	468	145	29	11
12	406	75	578	339	105	113	178	273	244	126	27	10
13	293	73	466	311	140	115	313	228	190	151	27	9.7
14	239	68	403	479	420	114	484	200	159	184	26	17
15	208	71	369	345	320	126	445	425	140	142	37	21
16	235	98	567	231	240	120	482	789	133	116	31	19
17	270	94	596	165	150	348	917	588	221	145	27	16
18	283	85	488	152	120	601	947	414	266	116	26	15
19	227	80	407	151	100	496	1,070	315	187	98	27	16
20	222	83	370	141	120	368	1,920	334	109	93	26	23
21	216	78	352	134	120	306	1,350	416	169	133	25	17
22	219	76	323	126	120	570	1,010	367	588	142	21	16
23	273	66	300	127	120	845	1,150	263	878	99	20	16
24	273	65	387	140	120	614	1,040	179	1,420	84	19	15
25	300	82	497	224	110	432	917	151	1,050	73	18	15
26	297	110	347	185	105	303	776	131	1,020	76	17	14
27	290	91	234	160	115	242	646	115	709	73	15	16
28	263	88	265	145	145	211	581	103	376	66	20	18
29	273	166	244	110	150	224	455	89	280	57	46	23
30	263	312	208	110	-----	251	328	77	1,320	52	31	27
31	151	-----	136	110	-----	208	-----	362	-----	48	25	-----
TOTAL	7,109	2,766	11,213	6,539	4,335	9,151	17,610	10,231	14,329	8,706	963	506.7
MEAN	229	92.2	362	211	149	295	587	330	478	281	31.1	16.9
MAX	545	312	636	479	420	845	1,920	789	1,420	1,220	62	27
MIN	78	57	120	110	109	113	154	77	109	48	15	9.7
MEAN†	101	106	348	211	154	325	629	386	475	281	26.8	15.4
CFSM†	1.10	1.15	3.78	2.29	1.67	3.53	6.84	4.20	5.16	3.05	.29	.17
IN.†	1.27	1.29	4.36	2.64	1.81	4.08	7.63	4.84	5.76	3.52	.34	.19

CAL YR 1971 TOTAL 67,003.1 MEAN 184 MAX 868 MIN 9.5
YR 1972 TOTAL 93,458.7 MEAN 255 MAX 1,920 MIN 9.7

MEAN† 183 CFSM† 1.99 IN† 27.06
MEAN† 255 CFSM† 2.77 IN† 37.72

† Adjusted for change in contents in Otis Reservoir.

Reservoirs in Connecticut River basin

- 01127850; 01128000. FIRST CONNECTICUT AND SECOND CONNECTICUT LAKES on Connecticut River are operated as a unit for storage of water for power and are used for recreation. The downstream order and usable capacity of each are as follows: Second Lake, 12 miles northeast of Pittsburg, N.H., 506,000,000 cu ft; First Lake, 5.6 miles northeast of Pittsburg, N.H., 3,330,000,000 cu ft. Records furnished by New England Power Co.
01129000. LAKE FRANCIS on Connecticut River at Pittsburg, N.H., completed in March 1940, used for storage of water for power and for recreation, has usable capacity of 4,326,000,000 cu ft. Records furnished by New Hampshire Water Resources Board.
- 01132000; 01132500. MOORE AND COMERFORD RESERVOIRS on Connecticut River are operated as a unit for storage of water for hydroelectric power development and are used for recreation. The downstream order and usable capacity of each are as follows: Moore Reservoir, 4.5 miles northwest of Littleton, N.H., filled in April 1956, 4,970,000,000 cu ft; Comerford Reservoir, 5 miles northeast of Monroe, N.H., completed in 1930, 1,279,000,000 cu ft. Records furnished by New England Power Co.
01141000. UNION VILLAGE RESERVOIR on Ompemuncie River, 0.3 mile north of Union Village, Vt., completed in 1949 for flood control, has usable capacity of 1,660,000,000 cu ft. Records furnished by Corps of Engineers.
- 01148000; 01150000. LAKES AND PONDS IN MASCOMA RIVER BASIN.--These reservoirs are operated as a unit for storage of water for power and are used for recreation. The reservoirs and usable capacity of each are as follows: 01148000. Goose Pond, 5.2 miles northeast of Mascoma, N.H., 509,000,000 cu ft; Grafton Pond, 8.5 miles southeast of Mascoma, 144,000,000 cu ft; Crystal Lake, 5.8 miles southeast of Mascoma, 75,000,000 cu ft; 01150000. Mascoma Lake at Mascoma, 337,000,000 cu ft; total usable capacity of the four reservoirs, 1,060,000,000 cu ft. Records furnished by New England Power Co. prior to January 1970 and by New Hampshire Water Resources Board thereafter.
01151400. NORTH HARTLAND RESERVOIR on Ottaquechee River at North Hartland, Vt., completed in 1961, used for flood control and recreation, has usable capacity of 3,110,000,000 cu ft. Records furnished by Corps of Engineers.
01152000. SUNAPEE LAKE on Sugar River at Sunapee, N.H., used for recreation and storage of water for power, has usable capacity of 862,000,000 cu ft. Records collected by Geological Survey.
01152900. NORTH SPRINGFIELD RESERVOIR on Black River at North Springfield, Vt., completed in 1960, used for flood control and recreation, has usable capacity of 2,230,000,000 cu ft. Records furnished by Corps of Engineers.
01155400. BALL MOUNTAIN RESERVOIR on West River, 2 miles north of Jamaica, Vt., completed in 1961, used for flood control and recreation, has usable capacity of 2,380,000,000 cu ft. Records furnished by Corps of Engineers.
01155900. TOWNSHEND RESERVOIR on West River, 1.8 miles northwest of Townshend, Vt., completed in 1961, used for flood control and recreation, has usable capacity of 1,460,000,000 cu ft. Records furnished by Corps of Engineers.
01157500. SURRY MOUNTAIN LAKE on Ashuelot River, 4.5 miles north of Keene, N.H., completed in 1942, used for flood control and recreation, has usable capacity of 1,420,000,000 cu ft. Records furnished by Corps of Engineers.
01158550. OTTER BROOK LAKE on Otter Brook, 2.5 miles northeast of Keene, N.H., completed in 1958, used for flood control and recreation, has usable capacity of 798,000,000 cu ft. Records furnished by Corps of Engineers.
01163500. BIRCH HILL RESERVOIR on Millers River, 1 mile east of South Royalston, Mass., completed in 1941 for flood control, has usable capacity of 2,180,000,000 cu ft. Records furnished by Corps of Engineers.
01164500. TULLY RESERVOIR on East Branch Tully River, 3.5 miles north of Athol, Mass., completed in 1948 for flood control, has usable capacity of 958,000,000 cu ft. Records furnished by Corps of Engineers.
- 01167490; 01168000. SOMERSET AND HARRIMAN RESERVOIRS in Deerfield River basin are operated as a unit for storage of water for hydroelectric power development and are used for recreation. The downstream order and usable capacity of each are as follows: Somerset Reservoir on East Branch Deerfield River, 2.5 miles northeast of Somerset, Vt., completed in 1913, 2,500,000,000 cu ft; Harriman Reservoir on Deerfield River at Davis Bridge, Vt., completed in 1924, 5,060,000,000 cu ft. Records furnished by New England Power Co.
01172400. BARRE FALLS RESERVOIR on Ware River, 4 miles east of Barre, Mass., completed in 1958 for flood control, has usable capacity of 1,050,000,000 cu ft. Records furnished by Corps of Engineers.
01175000. QUABBIN RESERVOIR on Swift River, 3.2 miles east of Belchertown, Mass., completed in August 1939 for storage of water for municipal supply, has usable capacity of 53,800,000,000 cu ft. Records furnished by Water Division, Metropolitan District Commission.
01176410. CONANT BROOK RESERVOIR in Chicopee River basin, 1.5 miles southeast of South Monson, Mass., completed in September 1966 for flood control, has usable capacity of 1,63,000,000 cu ft. Records furnished by Corps of Engineers.
01176500. LUDLOW RESERVOIR in Chicopee River basin, 3.2 miles northwest of Three Rivers, Mass., completed in 1875 for storage of water for municipal supply, has usable capacity of 201,000,000 cu ft. Records furnished by Board of Water Commissioners, Springfield, Mass.
01179000. KNIGHTVILLE RESERVOIR on Westfield River, 4 miles north of Huntington, Mass., completed in 1941 for flood control, has usable capacity of 2,130,000,000 cu ft. Records furnished by Corps of Engineers.
01180450. LITTLEVILLE LAKE on Middle Branch Westfield River, 2 miles north of Huntington, Mass., completed in 1965, used for flood control, water supply, and recreation, has usable capacity of 1,410,000,000 cu ft. Records furnished by Corps of Engineers.
- 01181900; 01182500. BORDEN BROOK AND COBBLE MOUNTAIN RESERVOIRS in Westfield Little River basin are operated as a unit for storage of water for municipal supply and for hydroelectric power development. The downstream order and usable capacity of each are as follows: Borden Brook Reservoir on Borden Brook, 3.5 miles south of Blandford, Mass., completed in 1909, 344,000,000 cu ft; Cobble Mountain Reservoir on Westfield Little River, 6.5 miles west of Westfield, Mass., completed in 1931, 3,050,000,000 cu ft. Records furnished by Board of Water Commissioners, Springfield, Mass.
01185000. OTIS RESERVOIR in Farmington River basin, 1 mile northeast of Cold Spring, Mass., completed in 1865, used for storage of water for power and for recreation, has usable capacity of 780,000,000 cu ft. Records furnished by Massachusetts Department of Natural Resources, Division of Forests and Parks.

CONNECTICUT RIVER BASIN

Reservoirs in Connecticut River basin--Continued

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972						
Date	First and Second Connecticut Lakes	Lake Francis	Moore and Comerford Reservoirs	Union Village Reservoir	Lakes and ponds in Mascoma River basin	North Hartland Reservoir
Sept. 30, 1971.....	3,225.1	3,594.3	5,608.3	1.4	834.5	22.5
Oct. 31.....	2,911.3	3,167.5	5,421.8	1.1	768.4	22.9
Nov. 30.....	2,308.6	2,706.5	5,601.9	6.4	760.3	22.9
Dec. 31.....	1,394.1	2,052.1	5,668.4	15.9	830.1	24.2
Jan. 31, 1972.....	1,032.1	1,446.3	5,573.9	14.7	886.4	23.6
Feb. 29.....	674.1	705.7	4,798.1	13.0	996.0	23.6
Mar. 31.....	274.8	514.0	2,502.8	15.8	650.9	28.6
Apr. 30.....	487.7	1,094.5	1,724.6	12.7	1,074.4	22.3
May 31.....	3,525.4	3,822.2	5,920.6	1.8	1,149.6	121.0
June 30.....	3,509.0	4,147.1	5,669.6	2.2	1,069.8	120.0
July 31.....	3,539.8	4,191.4	6,041.8	2.2	1,097.6	119.0
Aug. 31.....	3,104.2	3,782.7	5,548.3	1.6	1,053.2	126.0
Sept. 30.....	2,831.7	3,001.9	5,583.0	1.4	838.9	42.3
	Sunapee Lake	North Springfield Reservoir	Ball Mountain Reservoir	Townshend Reservoir	Surry Mountain Lake	Otter Brook Lake
Sept. 30, 1971.....	230	94.6	84.8	38.0	58.6	32.3
Oct. 31.....	163	23.3	24.4	39.0	59.8	32.6
Nov. 30.....	156	24.4	15.6	40.4	64.5	33.7
Dec. 31.....	211	26.9	14.4	42.5	82.0	46.0
Jan. 31, 1972.....	309	26.2	17.3	31.6	87.4	37.2
Feb. 29.....	316	25.4	16.4	40.0	79.5	36.5
Mar. 31.....	357	26.2	18.7	44.0	74.4	35.8
Apr. 30.....	544	104.7	190.1	45.5	254.0	144.4
May 31.....	646	26.9	96.9	38.6	66.9	34.0
June 30.....	741	43.6	111.8	55.2	76.9	34.4
July 31.....	651	37.0	97.3	37.4	52.2	33.0
Aug. 31.....	551	51.5	91.0	35.8	59.8	33.0
Sept. 30.....	449	23.3	77.5	33.4	58.6	32.3
	Birch Hill Reservoir	Tully Reservoir	Somerset and Harriman Reservoirs	Barre Falls Reservoir	Quabbin Reservoir	Conant Brook Reservoir
Sept. 30, 1971.....	2.2	23.0	5,682.8	2.2	30,426	0
Oct. 31.....	2.2	26.0	4,823.0	2.2	29,423	.1
Nov. 30.....	4.8	26.6	4,171.2	2.9	28,608	.2
Dec. 31.....	3.0	33.9	4,583.8	3.9	28,136	.1
Jan. 31, 1972.....	3.9	23.0	4,082.9	3.4	29,019	.1
Feb. 29.....	3.6	24.2	2,550.1	15.5	29,141	.1
Mar. 31.....	12.6	35.3	1,884.8	5.0	32,024	.1
Apr. 30.....	24.5	86.0	4,815.3	3.9	34,897	.1
May 31.....	3.9	59.6	6,319.1	2.9	37,427	.1
June 30.....	4.8	57.4	6,567.7	3.1	39,015	.1
July 31.....	1.8	57.4	6,271.7	2.6	38,724	.1
Aug. 31.....	2.2	35.3	5,256.4	2.2	37,365	.1
Sept. 30.....	2.2	40.0	4,531.6	2.2	35,914	0
	Ludlow Reservoir	Knightville Reservoir	Littleville Lake	Borden Brook and Cobble Mountain Reservoirs	Otis Reservoir	
Sept. 30, 1971.....	163.2	0.1	417.2	2,815.2	695.7	
Oct. 31.....	175.8	.3	419.8	2,528.4	352.0	
Nov. 30.....	170.4	.6	423.7	2,563.8	389.0	
Dec. 31.....	177.3	10.6	428.9	2,794.0	352.0	
Jan. 31, 1972.....	175.8	12.5	422.4	2,656.0	352.0	
Feb. 29.....	175.8	12.2	421.1	2,723.1	364.3	
Mar. 31.....	179.4	120.8	431.5	2,735.6	444.7	
Apr. 30.....	179.4	6.3	438.0	3,214.1	553.0	
May 31.....	183.0	.7	445.8	3,221.2	703.3	
June 30.....	183.0	42.0	524.2	3,307.6	695.7	
July 31.....	174.1	.3	419.8	2,936.9	695.7	
Aug. 31.....	163.2	.2	418.5	2,446.2	684.2	
Sept. 30.....	170.4	.1	415.9	2,291.8	680.3	

† Affected by diversion from Ware River and diversion to Wachusett Reservoir and Chicopee Valley aqueduct.

HOUSATONIC RIVER BASIN

209

01197000 East Branch Housatonic River at Coltsville, Mass.

LOCATION.--Lat 42°28'10", long 73°11'49", Berkshire County, on right bank 40 ft downstream from Hubbard Avenue Bridge at Coltsville, 1.2 miles upstream from Unkemet Brook, and 2 miles northeast of Pittsfield.

DRAINAGE AREA.--57.1 sq mi.

PERIOD OF RECORD.--March 1936 to current year. Prior to October 1945, published as Housatonic River at Coltsville.

GAGE.--Water-stage recorder. Datum of gage is 993.49 ft above mean sea level.

AVERAGE DISCHARGE.--36 years, 110 cfs (26.16 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, about 2,700 cfs June 30; minimum daily, 27 cfs Oct. 9, Sept. 10.
Period of record: Maximum discharge, 6,400 cfs Sept. 21, 1938 (gage height, 10.80 ft), from rating curve extended above 2,300 cfs on basis of computation of peak flow over dam; minimum daily, 4.4 cfs Aug. 15, 1936.
Maximum discharge since at least 1755, that of Sept. 21, 1938.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by powerplants above station and, since 1949, by Cleveland Brook Reservoir (usable capacity, 214,000,000 cubic feet) 5.4 miles upstream; regulation greater prior to 1955. Diversion above station from Cleveland Brook Reservoir for municipal supply of Pittsfield since May 1950; see table below for figures of diversion.

REVISIONS (WATER YEARS).--WSP 851: 1936(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	48	97	80	62	76	147	254	675	700	43	37
2	39	91	67	93	64	148	185	309	338	400	41	33
3	39	107	59	135	63	224	150	422	176	300	47	32
4	41	86	57	123	79	177	131	1,270	128	1,500	45	31
5	41	65	46	104	75	151	120	682	136	400	39	33
6	35	55	53	79	74	110	115	358	123	300	26	32
7	35	75	233	77	72	96	112	281	212	260	38	31
8	33	83	229	74	64	98	103	257	162	210	63	31
9	27	60	194	74	65	87	98	461	316	160	46	25
10	75	61	182	169	63	78	110	338	331	130	46	27
11	145	60	294	195	60	75	123	250	231	120	41	28
12	116	57	276	167	56	74	136	212	170	115	38	29
13	49	56	181	139	96	80	206	176	128	98	35	33
14	51	53	135	276	182	78	284	156	119	94	39	60
15	47	56	125	170	166	74	295	244	196	71	52	38
16	43	72	225	92	140	80	270	346	96	65	46	34
17	40	67	270	70	104	174	535	309	94	71	41	35
18	42	59	174	93	83	263	634	257	84	54	40	47
19	42	59	105	93	71	208	708	157	86	71	40	42
20	45	66	107	87	66	166	1,250	176	110	82	37	40
21	47	63	105	82	66	192	627	151	106	65	36	38
22	47	65	92	74	70	240	362	164	128	65	35	35
23	46	62	70	75	63	365	566	134	740	59	33	32
24	45	55	112	80	66	270	550	108	1,450	70	34	33
25	51	50	148	120	65	188	452	94	663	90	33	37
26	57	61	150	112	64	141	373	78	550	159	32	37
27	57	53	131	59	62	123	309	66	330	110	34	33
28	56	52	135	76	63	114	260	60	220	83	162	31
29	53	58	136	69	64	134	247	55	170	48	56	31
30	47	98	105	65	-----	159	254	54	1,600	43	52	34
31	45	-----	91	64	-----	131	-----	218	-----	42	41	-----
TOTAL	1,597	1,949	4,413	3,283	2,290	4,514	9,718	8,177	9,777	6,010	1,447	1,024
MEAN	51.5	65.0	142	106	79.0	146	324	264	326	194	46.7	34.1
MAX	145	107	294	276	182	365	1,250	1,270	1,400	1,500	162	47
MIN	27	48	46	64	56	74	98	54	84	42	32	27
(†)	10.4	7.04	13.8	11.9	12.7	15.0	12.1	11.9	16.5	10.7	11.7	9.75
CAL YR 1971	TOTAL 32,224	MEAN 88.3	MAX 628	MIN 12	MEAN†	100	CFSM†	1.75	INT	23.79		
WTR YR 1972	TOTAL 54,199	MEAN 148	MAX 1,600	MIN 27	MEAN†	160	CFSM†	2.80	INT	38.16		

PEAK DISCHARGE (BASE, 1,150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1415	4.81	1,500	6-30	-	-	-
5-4	0400	4.71	1,400	7-4	-	-	*2,700
6-24	0715	5.09	1,800				*2,400

*About.

† Diversion, in cubic feet per second, from Cleveland Brook Reservoir for municipal supply of Pittsfield; records furnished by city of Pittsfield.

‡ Adjusted for diversion.

NOTE.--No gage-height record June 26 to July 11.

01197300 Marsh Brook at Lenox, Mass.

LOCATION.--Lat 42°20'59", long 73°17'56", Berkshire County, on left bank 15 ft downstream from culvert on Hawthorne Street and 1.0 mile southwest of Lenox.

DRAINAGE AREA.--2.19 sq mi.

PERIOD OF RECORD.--December 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 990 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 4.53 cfs (28.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 69 cfs June 30 (gage height, 3.23 ft), from rating curve extended above 23 cfs; maximum gage height, 3.71 ft Mar. 17 (backwater from ice); no flow Aug. 23.

Period of record: Maximum discharge, 122 cfs July 18, 1965 (gage height, 2.75 ft), from rating curve extended above 33 cfs; maximum gage height, 4.07 ft Jan. 28, 1969 (backwater from ice); no flow at times during 1963, 1964, 1965, 1970, and 1972.

REMARKS.--Records fair. Recording rain gage at station since May 1963 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.4	5.3	4.4	3.0	4.0	9.7	9.1	22	22	.84	.47
2	1.1	3.7	4.2	6.6	3.0	15	10	10	20	17	1.5	.36
3	1.0	3.3	3.7	6.3	3.0	20	8.7	14	15	19	1.8	.36
4	.81	3.1	3.3	5.3	4.0	15	7.7	25	12	21	1.1	.36
5	.72	2.6	3.3	4.9	3.6	8.0	7.1	24	10	17	1.8	.18
6	.90	2.4	4.6	4.4	3.2	6.5	6.7	25	8.1	14	.84	.26
7	1.0	4.4	13	4.2	2.9	5.5	6.7	22	10	11	.12	.26
8	1.0	3.7	12	3.9	2.9	6.0	6.5	19	7.2	9.7	.47	.36
9	1.0	3.3	11	3.9	2.9	4.6	6.0	23	13	12	.18	.36
10	5.9	3.1	13	6.3	2.5	4.2	4.8	22	14	6.3	.47	.36
11	5.3	2.8	16	5.9	2.2	3.9	7.1	18	18	5.5	.36	.59
12	3.9	2.8	14	5.6	1.9	4.0	8.2	15	7.1	3.3	.03	.47
13	3.3	2.6	12	7.2	4.5	6.0	15	13	4.2	2.2	.03	.59
14	2.6	2.3	10	12	8.0	5.8	15	13	2.8	4.9	.06	1.1
15	2.1	2.4	10	7.0	6.0	4.6	13	15	4.4	6.8	.08	.84
16	1.8	2.8	12	5.6	4.5	4.6	15	18	8.2	4.3	.06	.71
17	1.6	2.8	11	4.4	3.9	30	19	16	6.2	5.8	.06	.84
18	1.4	2.6	8.8	4.4	3.4	34	18	18	1.1	1.8	.12	.84
19	1.3	2.4	7.2	4.4	3.0	23	14	15	.88	2.7	.04	.98
20	1.1	2.4	6.6	4.2	2.6	13	17	14	1.1	3.0	.02	.71
21	1.1	2.3	6.6	4.2	2.4	12	19	16	1.1	4.9	.26	.59
22	1.1	2.3	5.3	3.7	2.3	14	16	14	1.7	5.5	.02	.59
23	1.1	2.3	4.2	3.7	2.2	37	19	13	4.3	4.9	0	.59
24	1.3	2.3	6.6	3.7	2.1	21	16	11	12	4.9	.08	.59
25	1.4	3.1	7.9	5.6	2.0	12	15	8.0	16	4.9	.26	.84
26	1.3	2.4	6.9	4.6	2.0	8.0	14	7.2	15	4.6	.47	.59
27	1.1	2.3	6.3	3.9	1.8	7.1	13	6.4	11	3.4	.59	3.6
28	1.1	2.3	6.6	3.5	2.0	8.5	12	6.4	6.5	2.5	9.7	1.5
29	1.1	3.9	6.3	3.3	2.4	8.9	10	6.1	5.5	2.0	4.3	.18
30	1.3	6.9	6.6	3.2	-----	9.8	9.7	5.7	25	2.2	1.6	.59
31	1.3	-----	4.9	3.1	-----	9.1	-----	14	-----	.71	.59	-----
TOTAL	52.13	87.0	249.2	154.3	90.7	386.9	360.9	457.9	275.38	230.01	27.85	20.66
MEAN	1.68	2.80	8.04	4.98	3.11	12.5	12.0	14.8	9.18	7.42	.90	.69
MAX	5.9	4.9	16	12	8.0	37	19	25	25	22	9.7	3.6
MIN	.72	1.4	3.3	3.1	1.8	3.9	6.0	5.7	.88	.71	0	.18
CFSM	.77	1.32	3.67	2.27	1.42	5.71	5.48	6.76	4.19	3.39	.41	.32
IN.	.89	1.48	4.23	2.62	1.53	6.57	6.13	7.78	4.68	3.91	.47	.35

CAL YR 1971 TOTAL 2,078.72 MEAN 5.70 MAX 62 MIN 0 CFSM 2.60 IN 35.31
 VTP YR 1972 TOTAL 2,392.43 MEAN 6.54 MAX 37 MIN 0 CFSM 2.99 IN 40.64

PEAK DISCHARGE (BASE, 45 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	-	-	166				
3-22	1445	3.14	62				
6-30	1130	3.23	69				

† About.

HOUSATONIC RIVER BASIN

211

01197500 Housatonic River near Great Barrington, Mass.

LOCATION.--Lat 42°13'55", long 73°21'19", Berkshire County, on left bank at upstream side of highway bridge at Van Deusenville, 0.5 mile upstream from Williams River and 2 miles north of Great Barrington.

DRAINAGE AREA.--280 sq mi.

PERIOD OF RECORD.--May 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 683.04 ft above mean sea level. Prior to Oct. 1, 1931, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--59 years, 511 cfs (24.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,730 cfs Apr. 21 (gage height, 7.65 ft); minimum daily, 125 cfs Sept. 6, 7.

Period of record: Maximum discharge, 12,200 cfs Jan. 1, 1949 (gage height, 12.08 ft), from rating curve extended above 5,300 cfs on basis of computations of flow over dams at gage heights 11.72 and 12.08 ft; minimum daily, 1.0 cfs Oct. 18, 1914.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Regulation at low flow by powerplants above station.

REVISIONS (WATER YEARS).--WSP 415: 1913-14. WSP 781: 1928(M). WSP 1051: 1928, 1933. WSP 1301: 1914-15(M), 1917-27(M), 1929-31(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	244	611	487	340	293	820	1,060	1,920	2,620	239	315
2	219	301	440	537	330	624	925	1,030	2,300	2,770	229	146
3	213	496	353	736	330	1,332	918	1,180	1,930	2,250	256	141
4	199	453	335	713	400	1,160	828	2,780	1,330	2,680	265	136
5	206	383	284	644	420	813	748	3,460	1,040	2,750	232	136
6	206	345	275	537	400	573	699	2,930	920	2,190	214	125
7	212	366	843	503	370	440	664	2,150	1,120	1,730	197	125
8	208	452	1,480	465	350	531	611	1,760	1,100	1,370	247	133
9	199	413	1,250	450	340	498	567	1,860	1,220	1,090	273	133
10	307	355	1,110	685	370	425	555	1,930	1,470	920	229	133
11	950	340	1,300	858	310	395	573	1,770	1,760	777	211	130
12	703	333	1,550	873	230	395	595	1,480	1,440	665	197	130
13	516	325	1,340	798	400	430	762	1,260	1,150	611	188	133
14	415	305	1,050	1,110	760	470	1,260	1,090	976	672	178	155
15	373	296	910	1,170	820	425	1,250	1,100	819	617	211	191
16	337	366	1,060	730	660	465	1,140	1,483	714	499	221	178
17	300	383	1,230	520	490	820	1,400	1,710	630	523	201	163
18	278	345	1,200	555	400	1,870	1,860	1,710	541	487	191	158
19	277	325	910	543	350	1,750	2,150	1,560	517	423	168	169
20	265	320	769	555	340	1,110	2,750	1,320	499	434	175	175
21	249	315	727	525	360	865	3,560	1,290	541	440	161	161
22	245	315	678	481	370	1,370	3,050	1,140	585	553	161	161
23	244	293	561	440	320	2,170	2,540	888	904	457	163	169
24	240	259	579	440	325	2,010	2,430	735	1,650	396	158	169
25	256	255	830	503	316	1,610	2,270	617	2,390	379	158	169
26	278	259	895	600	293	1,150	1,970	547	2,650	535	158	152
27	260	275	828	490	293	858	1,770	511	2,290	523	152	152
28	265	289	776	440	280	865	1,440	469	1,800	407	401	146
29	248	311	790	430	280	798	1,220	434	1,320	330	481	141
30	248	573	720	370	-----	873	1,080	407	1,560	282	320	146
31	260	-----	611	350	-----	858	-----	672	-----	247	265	-----
TOTAL	9,478	10,299	26,392	18,478	11,267	27,764	42,335	42,330	39,346	30,627	6,520	4,671
MEAN	306	343	851	596	389	896	1,411	1,365	1,312	988	223	156
MAX	950	573	1,550	1,170	820	2,170	3,560	3,460	2,650	2,770	481	315
MIN	199	244	275	350	280	293	555	407	499	247	152	125
CFSM	1.09	1.23	3.04	2.13	1.39	3.20	5.04	4.88	4.69	3.53	.80	.56
IN.	1.26	1.37	3.51	2.45	1.50	3.69	5.62	5.62	5.23	4.07	.92	.62

CAL YR 1971 TOTAL 186,339 MEAN 511 MAX 2,010 MIN 91 CFSM 1.83 IN 24.76
WTR YR 1972 TOTAL 269,907 MEAN 737 MAX 3,560 MIN 125 CFSM 2.63 IN 35.86

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-21	0715	7.65	3,730	7-2	0600	6.58	2,880
5-5	1245	7.41	3,530	7-5	0345	6.54	2,850
6-26	0545	6.34	2,710				

NOTE.--No gage-height record Jan. 26 to Feb. 21.

HOUSATONIC RIVER BASIN

01198030 Schenob Brook near Sheffield, Mass.

LOCATION.--Lat 42°06'33", long 73°22'09", Berkshire County, on left bank at upstream side of Berkshire School Road bridge, 0.8 mile west of Sheffield, and 2.1 miles upstream from Hubbard Brook.

DRAINAGE AREA.--22.7 sq mi.

PERIOD OF RECORD.--November 1970 to June 1972 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (from topographic map).

EXTREMES.--Maximum discharge during period October 1971 to June 1972, 224 cfs Mar. 23 (gage height, 6.91 ft); minimum, 8.6 cfs Oct. 5. Period of record: Maximum discharge, 224 cfs Mar. 23, 1972 (gage height, 6.91 ft); minimum, 0.73 cfs Aug. 21, 1971.

REMARKS.--Records good except those for periods of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1971 TO JUNE 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	100	51	33	28	55	64	163			
2	11	25	60	49	32	50	58	60	155			
3	10	41	45	69	34	100	62	80	103			
4	9.5	41	37	72	43	120	56	170	77			
5	8.9	35	33	61	45	87	49	190	67			
6	9.1	30	35	52	35	60	50	140	63			
7	13	34	80	46	31	49	50	100	59			
8	16	46	110	46	28	60	49	90	57			
9	13	37	110	50	26	57	48	140	53			
10	31	32	100	80	25	41	50	120	83			
11	116	33	95	95	24	36	50	100	89			
12	113	30	100	82	23	43	55	85	56			
13	53	26	85	75	35	79	70	74	47			
14	44	23	70	100	60	71	110	70	45			
15	74	22	68	80	40	74	100	100	42			
16	72	30	71	62	34	88	85	140	41			
17	36	29	71	54	29	125	100	110	43			
18	26	25	60	54	27	216	120	104	41			
19	23	23	51	60	30	185	120	94	39			
20	23	23	48	56	27	128	150	90	43			
21	22	23	46	54	24	112	210	126	40			
22	20	23	51	52	23	134	190	132	44			
23	20	21	49	51	22	216	170	114	61			
24	22	19	50	54	22	177	150	88	88			
25	33	20	76	75	22	144	130	55	121			
26	36	22	64	65	24	122	110	39	162			
27	28	24	54	45	23	112	95	33	140			
28	23	27	56	42	22	104	84	29	97			
29	21	35	54	39	23	100	74	25	72			
30	20	70	47	37	-----	90	68	22	68			
31	19	-----	49	35	-----	62	-----	48	-----			
TOTAL	975.5	887	2,025	1,843	866	3,070	2,768	2,832	2,259			
MEAN	31.5	29.6	65.3	59.5	29.9	99.0	92.3	91.4	75.3			
MAX	116	70	110	100	60	216	210	190	163			
MIN	8.9	18	33	35	22	28	48	22	39			
CFSM	1.39	1.30	2.88	2.62	1.32	4.36	4.07	4.03	3.32			
IN.	1.60	1.45	3.32	3.02	1.42	5.03	4.54	4.64	3.70			

CAL YR 1971 TOTAL 14,634.05 MEAN 40.1 MAX 146 MIN .81 CFSM 1.77 IN 23.98

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	2030	5.50	160	5-5	-	-	†200
3-18	1145	6.88	222	5-21	1815	5.48	143
3-23	0715	6.91	224	6-1	1330	6.30	187
4-21	-	-	†220	6-26	1630	6.01	170

† About.

NOTE.--No gage-height record Nov. 15 to Dec. 14, Jan. 9 to Feb. 27, Apr. 8 to May 17.

HOUSATONIC RIVER BASIN

213

01198070 Willard Brook near Sheffield, Mass.

LOCATION.--Lat 42°06'41", long 73°23'38", Berkshire County, on right bank 125 ft downstream from Berkshire School Road bridge, 300 ft downstream from Fawn Lake, and 2.0 miles west of Sheffield.

DRAINAGE AREA.--3.21 sq mi.

PERIOD OF RECORD.--November 1970 to June 1972 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 690 ft (from topographic map).

EXTREMES.--Maximum discharge during period October 1971 to June 1972, 48 cfs May 4 (gage height, 3.90 ft); minimum, 1.0 cfs May 13; minimum daily, 3.5 cfs Oct. 5, Nov. 24, Feb. 12, 23.

Period of record: Maximum discharge, 48 cfs May 4, 1972 (gage height, 3.90 ft); minimum, 0.19 cfs Sept. 7, 1971; minimum daily, 0.22 cfs Aug. 23-26, 1971.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Occasional regulation by pond above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.8	12	7.5	5.3	5.3	11	8.5	28			
2	4.2	6.4	8.7	9.2	5.1	12	11	8.5	19			
3	3.9	7.3	6.6	12	5.2	14	11	13	14			
4	3.7	6.4	6.0	11	7.3	11	9.7	30	11			
5	3.5	5.3	6.2	9.9	5.9	9.7	9.2	26	12			
6	3.7	4.5	6.4	8.3	5.0	8.0	8.9	17	11			
7	4.0	6.2	15	9.0	4.9	7.4	9.8	15	11			
8	4.0	6.6	18	7.6	4.5	8.5	8.2	14	10			
9	3.7	5.9	15	9.4	4.1	7.0	8.2	18	10			
10	4.0	5.5	15	16	5.5	5.5	8.6	15	17			
11	15	5.5	17	14	3.7	5.7	8.7	13	13			
12	10	5.3	18	17	3.5	8.2	9.4	11	10			
13	8.5	4.9	14	13	4.7	4.5	12	7.3	9.5			
14	7.4	4.6	12	16	9.4	7.5	14	5.1	9.1			
15	6.6	4.4	12	17	4.4	7.0	12	15	8.7			
16	6.0	5.1	14	9.7	5.5	6.8	12	19	8.5			
17	5.6	5.1	12	8.7	4.6	20	19	17	8.4			
18	5.3	4.4	11	8.8	4.4	28	19	14	7.4			
19	5.0	4.4	9.7	9.6	4.7	17	18	14	7.3			
20	4.8	4.4	9.0	9.0	4.5	14	27	14	7.3			
21	4.6	4.4	9.3	8.7	3.6	13	27	17	7.3			
22	4.4	4.4	8.4	8.3	3.7	25	20	13	7.9			
23	4.3	4.2	7.1	8.2	3.5	34	22	11	9.7			
24	4.3	3.5	11	8.7	3.6	23	20	10	16			
25	5.0	3.4	17	12	3.6	18	17	9.4	17			
26	6.0	4.7	9.7	9.5	3.9	15	15	8.1	20			
27	5.2	4.7	10	4.8	3.7	13	12	7.7	15			
28	4.7	6.8	10	6.6	3.4	12	11	7.3	12			
29	4.4	8.7	9.4	6.3	3.8	12	10	8.2	10			
30	4.4	17	9.6	6.1	-----	12	8.7	7.6	26			
31	3.8	-----	9.5	5.6	-----	11	-----	16	-----			
TOTAL	168.6	168.3	343.0	298.5	135.6	403.5	409.4	409.7	373.1			
MEAN	5.44	5.41	11.1	9.63	4.68	13.0	13.6	13.2	12.4			
MAX	15	17	18	16	9.4	34	27	30	28			
MIN	3.5	3.5	6.2	5.6	3.5	5.3	8.2	5.1	7.3			
CFSM	1.59	1.75	3.46	3.00	1.46	4.05	4.24	4.11	3.86			
IN ₂	1.95	1.95	3.07	3.48	1.57	4.68	4.74	4.75	4.32			

CAL YR 1971 TOTAL 2,426.02 MEAN 6.65 MAX 24 MIN .22 CFSM 2.07 IN 28.11

NOTE.--No gage-height record Oct. 1-27.

HOUSATONIC RIVER BASIN

01198075 Hubbard Brook at Sheffield, Mass.

LOCATION.--Lat 42°07'13", long 73°21'46", Berkshire County, on right bank 10 ft upstream from Cook Road bridge, 200 ft downstream from Mill Pond, and 0.9 mile northwest of Sheffield.

DRAINAGE AREA.--25.8 sq mi.

PERIOD OF RECORD.--November 1970 to July 1972 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 655 ft (from topographic map).

EXTREMES.--Maximum discharge during period October 1971 to July 1972, 432 cfs July 4 (gage height, 9.57 ft); minimum, 3.9 cfs May 26; minimum daily, 4.2 cfs May 27.

Period of record: Maximum discharge, 432 cfs July 4, 1972 (gage height, 9.57 ft); minimum, 3.9 cfs May 23, 1971, May 26, 1972; minimum daily, 4.0 cfs May 23, 1971.

REMARKS.--Records good. Occasional regulation by pond above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	111	41	24	28	67	72	176	267		
2	23	24	65	44	23	63	70	64	171	213		
3	21	36	54	62	23	136	70	69	125	248		
4	19	35	47	63	30	119	65	165	91	370		
5	18	30	41	55	32	90	58	243	86	290		
6	17	26	39	41	28	61	56	210	80			
7	20	25	65	42	26	52	56	166	69			
8	21	37	121	40	22	61	51	132	63			
9	19	33	126	40	21	56	47	144	59			
10	56	29	115	82	20	46	50	147	107			
11	137	28	117	103	19	39	53	124	125			
12	100	28	121	89	17	40	59	106	88			
13	58	27	118	78	18	54	73	87	64			
14	44	25	105	99	43	53	118	69	54			
15	41	59	95	98	51	45	111	117	48			
16	37	81	98	51	43	44	101	147	46			
17	34	72	97	48	33	74	118	152	44			
18	29	10	81	46	29	232	136	146	40			
19	28	21	57	49	27	203	136	128	38			
20	27	24	54	53	24	123	161	111	37			
21	26	24	55	52	22	56	256	114	38			
22	25	24	53	49	21	111	224	114	41			
23	24	23	39	47	20	259	215	96	47			
24	23	21	50	47	20	216	199	74	95			
25	31	22	70	53	20	155	176	61	135			
26	34	23	63	49	22	118	147	35	181			
27	32	24	56	43	22	98	123	4.2	160			
28	28	27	58	37	21	83	106	5.1	118			
29	26	35	57	30	22	78	91	7.1	79			
30	24	81	51	30	-----	78	78	8.8	150			
31	22	-----	50	28	-----	75	-----	54	-----			
TOTAL	1,068	975	2,329	1,689	743	2,986	3,271	3,172.2	2,655			
MEAN	34.5	32.5	75.1	54.5	25.6	96.3	109	102	88.5			
MAX	137	81	126	103	51	259	256	243	181			
MTN	17	10	39	28	17	28	47	4.2	37			
CFSM	1.34	1.26	2.91	2.11	.99	3.73	4.22	3.95	3.43			
IN.	1.54	1.41	3.36	2.44	1.07	4.31	4.72	4.57	3.83			

CAL YR 1971 TOTAL 15,360.2 MEAN 42.1 MAX 137 MIN 4.0 CFSM 1.63 IN 22.15

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	1130	7.05	271	5-5	0900	6.70	252
3-23	1200	7.23	282	7-1	0215	7.38	291
4-21	0830	6.99	267	7-4	0045	9.57	432

HUDSON RIVER BASIN

215

01329000 Batten Kill at Arlington, Vt.

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, on left bank 5 ft upstream from bridge on Highway 313 at Arlington and 0.9 mile downstream from Warm Brook.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 597.68 ft above mean sea level, unadjusted. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

AVERAGE DISCHARGE.--44 years, 327 cfs (29.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,410 cfs May 4 (gage height, 7.79 ft); minimum, 79 cfs Oct. 4, 5, 6, Sept. 13.
Period of record: Maximum discharge, 11,100 cfs Mar. 18, 1936 (gage height, 11.3 ft, from floodmarks, present site), from rating curve extended above 5,200 cfs on basis of slope-area measurement at gage height 10.8 ft and computation of peak flow over dam; minimum, 37 cfs Sept. 25, 1964.

REMARKS.--Records good. Prior to 1949, diurnal fluctuation at low flow caused by mill above station.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	94	175	262	239	220						
2	92	107	138	273	227	605	383	1,490	1,070	952	165	94
3	91	135	140	410	220	1,140	413	1,990	793	648	158	91
4	80	116	143	314	234	677	365	2,360	460	556	177	91
5	80	105	121	265	238	474	333	3,160	440	800	191	91
6							314	2,700	490	523	156	90
7	82	100	153	232	230	355	302	1,760	386	410	143	86
8	90	131	531	250	205	317	297	1,580	519	369	140	85
9	86	149	455	215	200	416	275	1,550	518	313	165	83
10	92	120	314	215	150	343	273	1,780	1,210	336	150	87
11	149	111	428	416	180	269	285	1,540	891	306	143	87
12	420	114	767	394	175	257	296					
13	229	112	774	410	170	261	304	1,090	600	302	133	83
14	166	113	518	363	202	251	495	845	460	278	126	80
15	139	106	397	686	358	245	640	826	395	242	126	87
16	125	110	367	457	324	235	516	952	313	234	131	181
17												190
18	121	185	682	326	304	230	515	884	690	201	122	122
19	110	166	712	309	228	632	948	1,000	714	242	136	104
20	105	141	484	304	209	1,010	1,050	1,300	430	196	138	98
21	102	159	324	338	183	615	1,290	897	373	218	136	206
22	99	238	324	311	200	431	2,040	690	369	263	119	194
23	99	187	311	280	195	387	1,630	660				
24	97	170	265	251	188	469	1,120	551	317	213	110	133
25	94	150	219	404	170	709	1,090	455	690	192	104	128
26	93	123	381	421	175	546	1,300	395	1,370	332	100	113
27	102	128	631	556	169	437	1,300	347	1,180	395	131	103
28										324	116	101
29	119	148	417	517	167	386	1,160	306	1,350	302	106	100
30	117	149	343	383	165	351	952	289	845	299	103	113
31	107	148	371	331	161	324	425	249	578	234	124	104
32	101	150	367	299	161	326	936	251	450	199	118	96
33	97	212	300	269	-----	364	1,180	237	654	181	104	104
34	94	-----	289	254	-----	350	-----	347	-----	167	98	-----
TOTAL	3,672	4,177	11,821	10,725	6,107	13,632	22,727	33,327	19,222	10,463	4,097	3,325
MEAN	118	139	381	346	211	440	758	1,075	641	338	132	111
MAX	420	238	774	686	368	1,140	2,040	3,160	1,370	952	181	206
MIN	80	94	121	215	161	220	273	237	313	167	98	80
CFSM	.78	.91	2.51	2.28	1.39	2.89	4.99	7.07	4.22	2.22	.87	.73
IN.	.90	1.02	2.89	2.62	1.49	3.34	5.56	8.16	4.70	2.56	1.00	.81

CAL YR 1971 TOTAL 110,000 MEAN 301 MAX 1,980 MIN 68 CFSM 1.98 IN 26.92
WTR YR 1972 TOTAL 143,295 MEAN 392 MAX 3,160 MIN 80 CFSM 2.58 IN 35.07

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	1830	7.79	3,410				

HUDSON RIVER BASIN

01331400 Dry Brook near Adams, Mass.

LOCATION.--Lat 42°35'20", long 73°06'48", Berkshire County, on right bank 20 ft upstream from bridge on State Highway 116, just south of junction of Wells Road and State Highway 116, and 2.5 miles south of Adams.

DRAINAGE AREA.--7.53 sq mi.

PERIOD OF RECORD.--November 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

AVERAGE DISCHARGE.--9 years (1963-72), 14.4 cfs (25.97 inches per year).

EXTREMES.--Current year: Maximum discharge, 725 cfs May 3 (gage height, 4.56 ft), from rating curve extended above 250 cfs; maximum gage height, 4.69 ft Mar. 2 (backwater from ice); minimum discharge, 0.80 cfs Sept. 28. 29
Period of record: Maximum discharge, 984 cfs July 19, 1966 (gage height, 5.03 ft), from rating curve extended above 250 cfs; no flow Sept. 9-11, 15-20, 1964, part of June 28, 1965, Aug. 10, 14-20, 1970.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Recording rain gage at station since May 1963 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.8	10	12	9.0	12	23	69	191	100	2.4	1.5
2	3.6	18	7.8	15	8.5	60	21	97	54	60	2.4	1.4
3	3.5	16	8.0	25	8.0	50	16	159	37	100	3.5	1.3
4	3.5	10	7.8	14	12	25	14	210	33	120	2.9	1.3
5	3.3	7.6	8.0	15	9.5	12	13	80	70	60	2.2	1.2
6	3.6	6.3	7.0	11	8.4	14	12	46	57	40	2.0	1.1
7	4.3	15	40	12	7.4	15	12	36	73	28	2.0	1.0
8	3.8	13	27	11	6.6	10	11	45	57	20	4.1	1.0
9	3.5	9.3	20	16	6.0	10	11	70	156	15	2.9	1.0
10	33	7.9	25	30	5.6	12	13	43	90	13	2.6	.98
11	26	7.9	60	24	5.4	11	13	31	50	12	2.3	.91
12	13	7.2	48	16	5.0	10	21	24	35	10	2.0	.91
13	9.0	7.2	31	23	10	9.5	32	20	25	9.0	2.0	1.1
14	6.9	6.9	23	40	32	9.0	60	17	19	9.5	2.0	2.0
15	6.3	6.9	24	26	15	8.2	36	41	16	7.6	2.3	1.7
16	6.0	9.7	68	16	9.5	7.9	57	49	14	6.7	1.9	1.3
17	5.5	9.3	46	16	7.0	60	133	50	12	6.7	1.7	1.1
18	5.1	7.9	28	19	5.8	31	133	46	10	5.4	1.7	1.4
19	4.6	8.3	19	19	5.0	21	167	29	15	4.8	1.8	1.8
20	4.3	9.3	18	16	6.0	16	242	28	20	4.8	1.7	1.8
21	4.3	8.3	17	13	5.8	16	100	30	12	4.8	1.4	1.4
22	4.1	7.2	15	11	5.5	106	73	21	17	4.1	1.2	1.3
23	4.1	6.5	11	13	5.2	54	117	16	50	4.3	1.1	1.2
24	4.1	5.5	14	13	4.8	26	124	14	200	4.8	1.4	.98
25	5.8	5.4	30	18	4.8	20	44	11	170	7.0	1.3	.98
26	6.0	8.0	25	16	4.6	16	69	9.5	110	7.0	1.2	1.0
27	5.5	7.0	18	12	4.5	14	55	8.8	70	5.0	2.0	.98
28	5.1	7.6	25	13	4.5	14	50	7.9	45	3.6	5.0	.91
29	4.3	6.3	19	11	6.0	24	66	6.7	35	3.0	2.2	.80
30	4.1	14	15	10	-----	16	69	6.1	150	2.6	1.8	1.2
31	3.9	-----	14	9.5	-----	15	-----	80	-----	2.4	1.6	-----
TOTAL	203.9	265.4	726.6	521.5	227.4	726.6	1,852	1,401.0	1,893	681.1	66.6	36.55
MEAN	6.58	8.85	23.4	16.8	7.84	23.4	61.7	45.2	63.1	22.0	2.15	1.22
MAX	33	18	68	40	32	106	242	210	200	120	5.0	2.0
MIN	3.3	3.8	6.0	9.5	4.5	7.9	11	6.1	10	2.4	1.1	.80
CFSM	.87	1.18	3.11	2.23	1.04	3.11	8.19	6.00	8.36	2.92	.29	.16
IN.	1.01	1.31	4.59	2.58	1.12	3.59	9.15	6.92	9.35	3.36	.33	.18

CAL YR 1971 TOTAL 5,352.59 MEAN 14.7 MAX 208 MIN .81 CFSM 1.95 IN 26.44
WTR YR 1972 TOTAL 8,601.65 MEAN 23.5 MAX 242 MIN .80 CFSM 3.12 IN 42.49

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1230	4.25	515	6-9	0645	3.99	374
5-3	2130	4.56	725	6-24	-	-	unknown
6-1	0600	4.25	515	6-30	-	-	unknown

NOTE.--No gage-height record June 10 to July 13.

HUDSON RIVER BASIN

217

01331500 Hoosic River at Adams, Mass.

LOCATION.--Lat 42°36'37", long 73°07'32", Berkshire County, on right bank at Adams, just downstream from Dry Brook and 0.5 mile upstream from Pecks Brook.

DRAINAGE AREA.--46.3 sq mi.

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 836.01 ft above mean sea level; prior to Oct. 1, 1964, datum was 1.00 ft higher.

AVERAGE DISCHARGE.--41 years, 89.0 cfs (26.10 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 987 cfs May 2 (gage height, 3.44 ft), from rating curve extended above 410 cfs; minimum, 19 cfs Sept. 13, 17, 18, 23-29; minimum daily, 19 cfs Sept. 23, 24, 29.
Period of record: Maximum discharge, 5,080 cfs Sept. 21, 1938 (gage height, 9.25 ft, present datum), from rating curve extended above 1,100 cfs on basis of computation of peak flow over dam; minimum daily, 8.0 cfs Aug. 31, Sept. 1, 1968.

REMARKS.--Records good except those for periods of shifting control or no gage-height record, which are fair. Diversion above station for municipal supply of Adams. See table below for figures of diversion. Some diurnal fluctuation by mill above station prior to 1961. Flow regulated by Cheshire Reservoir 5.1 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	20	43	67	58	50	131	255	456	320	43	27
2	40	46	39	79	57	81	155	283	241	228	41	27
3	31	60	41	104	56	195	135	456	191	313	43	27
4	28	42	50	89	71	119	126	593	165	340	41	27
5	22	38	52	83	64	81	119	372	174	232	40	27
6	20	37	50	75	60	66	115	287	155	225	39	27
7	25	52	153	71	58	62	115	269	197	197	35	47
8	37	46	145	69	55	66	110	255	147	165	42	65
9	34	36	97	69	53	56	108	332	372	125	38	52
10	87	38	106	122	53	50	110	266	273	121	40	22
11	126	37	214	1	52	50	117	232	200	121	38	22
12	56	36	176	11	50	50	117	212	165	112	31	20
13	46	36	173	97	75	53	158	160	142	105	31	20
14	64	33	117	179	131	55	220	101	112	92	31	24
15	81	36	115	119	97	49	235	104	106	83	33	24
16	79	44	173	85	87	50	277	147	112	77	31	21
17	75	40	168	73	67	145	456	165	106	71	32	20
18	49	38	133	79	62	315	492	269	99	57	32	21
19	55	38	113	83	56	229	585	177	108	51	31	21
20	71	41	113	82	56	195	770	163	104	48	31	21
21	67	38	110	78	53	189	396	171	85	48	31	20
22	44	38	104	76	52	280	320	160	75	48	31	20
23	28	35	91	82	52	322	412	182	218	48	31	19
24	23	31	108	80	50	212	408	155	468	48	31	19
25	25	33	140	120	50	212	368	137	309	49	31	20
26	23	38	110	95	50	195	324	91	336	62	31	20
27	23	38	108	70	49	184	259	80	222	57	35	20
28	22	35	108	66	49	176	212	75	182	51	43	20
29	21	39	89	63	47	176	252	71	147	48	33	19
30	21	50	81	61	-----	187	259	65	428	46	25	21
31	20	-----	77	60	-----	133	-----	130	-----	45	27	-----
TOTAL	1,395	1,179	3,356	2,715	1,770	4,285	7,861	6,415	8,095	3,633	1,000	760
MEAN	45.0	39.3	108	87.6	61.0	138	262	207	203	117	34.8	23.3
MAX	126	60	214	179	131	322	770	593	468	340	43	65
MIN	20	20	38	60	47	49	108	65	75	45	27	19
(f)	2.70	3.02	2.96	3.33	3.27	3.10	2.97	3.46	3.02	2.90	3.56	3.24

FOR YR 1971 TOTAL 26,022 MEAN 71.3 MAX 361 MIN 18 MEAN 74.5 CFSM 1.61 IN 21.84
WTR YR 1972 TOTAL 40,544 MEAN 111 MAX 770 MIN 19 MEAN 114 CFSM 2.46 IN 33.50

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1200	3.30	910				
5-3	2200	3.44	987				

†Diversion, in cubic feet per second, for municipal supply of Adams; record furnished by Adams Fire District.

‡Adjusted for diversion.

NOTE.--Shifting-control method used Mar. 2 to Apr. 19. No gage-height record July 30 to Sept. 7.

01332000 North Branch Hoosic River at North Adams, Mass.

LOCATION.--Lat 42°42'08", long 73°05'37", Berkshire County, on left bank at North Adams, 0.4 mile downstream from Hudson Brook, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--39.0 sq mi.

PERIOD OF RECORD.--June 1931 to current year.

GAGE.--Water-stage recorder. Concrete control at present site. Datum of gage is 820.46 ft above mean sea level. Prior to Sept. 23, 1938, at site 100 ft upstream at same datum. July 9, 1939, to July 29, 1960, nonrecording gage at site 500 ft upstream at datum about 4.6 ft lower.

AVERAGE DISCHARGE.--41 years, 93.6 cfs (32.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,300 cfs May 3 (gage height, 9.06 ft), from rating curve extended above 1,100 cfs on basis of computation of flow over dam at gage height 10.28 ft; minimum, 7.2 cfs Sept. 12, 13; minimum daily, 7.3 cfs Sept. 12.

Period of record: Maximum discharge, 8,950 cfs Sept. 21, 1938 (gage height, 12.05 ft, from floodmarks), by computation of peak flow over dam; minimum, 1.7 cfs July 30, 1965; minimum daily, 3.1 cfs July 30, 1965.

Flood in November 1927 reached a discharge of 9,980 cfs, by computation of flow over dam.

REMARKS.--Records good. Infrequent diurnal fluctuation at low flow by mill above station; more frequent fluctuation prior to 1948.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1933(M). WSP 801: 1928(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	63	68	52	57	132	508	592	320	14	11
2	19	50	46	93	48	147	144	631	225	167	14	10
3	18	61	47	150	44	263	114	798	138	280	15	9.7
4	18	46	46	130	70	144	99	1,060	135	295	15	9.2
5	19	39	35	82	55	105	93	570	119	163	13	9.7
6	21	34	41	62	48	85	85	326	105	129	12	8.7
7	30	63	234	72	44	91	82	252	209	103	12	8.3
8	29	63	149	63	38	85	76	285	149	85	38	7.9
9	25	49	110	66	37	69	76	466	381	70	22	7.9
10	163	44	146	142	33	63	83	270	196	61	24	7.7
11	209	44	348	133	31	67	88	200	140	56	15	7.6
12	110	43	239	125	29	65	103	180	110	47	13	7.3
13	78	41	153	109	50	59	192	132	93	43	13	13
14	65	43	120	214	190	55	313	115	82	44	13	81
15	58	39	118	121	107	54	239	167	72	35	15	49
16	52	53	280	95	83	55	295	192	76	31	13	22
17	47	53	225	96	63	182	822	460	74	33	12	17
18	43	47	147	112	55	269	715	645	60	27	14	15
19	40	53	103	114	45	142	1,743	266	55	31	16	36
20	38	58	110	87	52	105	1,390	205	60	40	12	31
21	35	53	98	75	51	56	520	181	52	30	10	18
22	33	47	75	65	48	219	403	140	67	26	9.2	16
23	32	39	59	75	46	381	496	115	191	40	8.7	14
24	31	33	113	77	45	191	604	98	526	44	8.7	12
25	39	32	180	104	40	136	508	83	375	31	8.3	12
26	40	47	111	94	39	113	410	72	353	24	8.3	12
27	35	41	98	76	37	101	342	65	188	21	10	12
28	33	43	104	70	37	53	305	57	129	18	65	11
29	31	46	98	64	40	104	403	50	100	15	31	11
30	29	82	82	60	-----	111	460	45	454	14	17	14
31	27	-----	78	56	-----	101	-----	164	-----	14	13	-----
TOTAL	1,475	1,401	3,838	2,920	1,557	3,810	10,646	8,778	5,500	2,317	505.2	501.0
MEAN	47.6	46.7	124	94.2	53.7	123	355	283	183	74.7	16.3	16.7
MAX	209	82	348	214	190	381	1,390	1,060	592	300	65	81
MIN	18	27	35	56	29	54	76	45	52	14	8.3	7.3
CFSM	1.22	1.20	3.13	2.42	1.38	3.15	9.13	7.26	4.69	1.92	.42	.43
IN.	1.41	1.34	3.66	2.79	1.49	3.63	10.15	8.37	5.25	2.21	.48	.48

CAL YR 1971 TOTAL 32,197.5 MEAN 88.2 MAX 814 MIN 8.3 CFSM 2.26 IN 30.71
WTR YR 1972 TOTAL 43,248.2 MEAN 118 MAX 1,390 MIN 7.3 CFSM 3.03 IN 41.25

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2300	8.88	2,060				
5-3	2315	9.06	2,300				
5-17	2115	8.90	2,090				

HUDSON RIVER BASIN

219

01332500 Hoosic River near Williamstown, Mass.

LOCATION.--Lat 42°42'21", long 73°10'50", Berkshire County, on left bank 1.0 mile upstream from Green River and 1.2 miles east of Williamstown.

DRAINAGE AREA.--132 sq mi.

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 595 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 265 cfs (27.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,100 cfs May 3 (gage height, 7.17 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; minimum, 67 cfs Sept. 6, 10-13, 25-27, 29, 30; minimum daily, 67 cfs Sept. 10-12, 26.

Period of record: Maximum discharge, 13,000 cfs Dec. 31, 1948 (gage height, 14.85 ft), from rating curve extended above 4,300 cfs on basis of contracted-opening measurement of peak flow; minimum, 5.8 cfs Aug. 30, 31, Oct. 26, 1940; minimum daily, 25 cfs Sept. 2, 1968.

REMARKS.--Records good. Slight diurnal fluctuation at low flow prior to 1966 caused by mills above station. Some regulation by Cheshire Reservoir 17 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	98	193	233	181	229	404	964	1,570	1,230	97	78
2	113	160	145	273	178	580	443	1,140	760	675	94	78
3	100	197	138	409	174	780	364	1,500	526	815	110	78
4	97	138	152	308	249	422	324	2,730	908	1,360	110	78
5	94	123	131	278	205	294	303	1,400	535	635	97	78
6	94	117	145	225	195	249	294	870	467	571	94	72
7	113	191	625	245	180	249	293	740	780	481	94	88
8	120	178	494	221	145	245	269	790	535	413	134	90
9	130	138	350	220	145	229	269	1,120	1,150	341	127	89
10	260	131	481	481	160	185	290	790	800	311	113	67
11	520	131	891	472	155	185	337	645	580	303	100	67
12	250	124	675	422	150	181	341	562	476	265	84	67
13	190	120	476	386	320	205	630	472	418	245	84	77
14	229	124	386	710	571	201	635	360	350	225	84	143
15	250	124	404	422	368	178	635	400	316	193	84	104
16	240	152	710	294	294	185	725	470	320	174	84	71
17	220	145	640	269	217	680	1,700	700	299	174	84	70
18	200	134	467	278	193	1,000	1,600	1,200	253	138	84	69
19	173	139	355	290	150	530	1,990	600	290	138	87	95
20	200	152	355	261	135	409	3,290	520	364	145	84	84
21	190	138	341	249	160	460	1,540	500	245	138	84	69
22	150	141	299	233	150	845	1,000	450	303	127	84	71
23	120	131	253	273	160	1,120	1,240	483	616	145	84	69
24	100	117	386	273	155	598	1,330	390	1,540	167	84	69
25	110	117	508	427	163	481	1,153	346	1,060	138	84	68
26	105	134	359	329	152	422	1,000	253	1,140	155	84	67
27	105	127	346	245	152	386	830	233	695	124	94	69
28	100	134	355	233	148	359	725	209	535	117	193	69
29	100	148	370	217	159	400	855	185	440	110	107	69
30	98	253	278	205	-----	418	914	170	1,220	103	84	69
31	96	-----	265	197	-----	341	-----	553	-----	97	78	-----
TOTAL	4,922	4,242	11,863	9,573	5,834	12,986	25,854	21,742	19,091	9,953	2,569	2,332
MEAN	159	141	383	309	200	419	862	701	636	321	95.8	77.7
MAX	520	253	891	710	571	1,120	3,290	2,730	1,570	1,230	193	143
MIN	94	98	131	197	135	178	269	170	245	97	78	67
CFS	1.20	1.37	2.90	2.34	1.52	3.17	6.53	5.31	4.82	2.43	.73	.59
IN	1.39	1.20	3.34	2.70	1.64	3.66	7.29	6.13	5.38	2.80	.84	.66

CAL YR 1971 TOTAL 93,666 MEAN 297 MAX 1,610 MIN 52 CFS 1.95 IN 26.40
 WTA YR 1972 TOTAL 131,331 MEAN 359 MAX 3,290 MIN 67 CFS 2.72 IN 37.01

PEAK DISCHARGE (BASE, 2,400 CFS).

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	1615	7.09	4,000				
5-3	2400	7.17	4,100				

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

HUDSON RIVER BASIN

01333000 Green River at Williamstown, Mass.

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, on left bank 0.1 mile upstream from bridge on State Highway 2 at Williamstown and 0.8 mile upstream from mouth.

DRAINAGE AREA.--42.6 sq mi.

PERIOD OF RECORD.--September 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (from topographic map).

AVERAGE DISCHARGE.--23 years, 77.5 cfs (24.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs June 24 (gage height, 4.10 ft); minimum, 7.8 cfs Sept. 24, 29.

Period of record: Maximum discharge, 2,730 cfs June 15, 1969 (gage height, 4.94 ft), from rating curve extended above 750 cfs on basis of slope-area measurement at gage height 4.94 ft; maximum gage height, 5.94 ft Sept. 12, 1960; minimum discharge, 3.1 cfs Sept. 20, 22, 24, 25, 1964.

Flood of Dec. 31, 1948, reached a stage of about 7.5 ft, from floodmarks.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Slight diurnal fluctuation at times caused by mill above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	24	50	87	60	66	127	167	355	360	21	12
2	24	48	42	142	54	474	128	213	183	251	20	12
3	24	37	40	143	49	317	111	388	138	275	21	11
4	23	33	40	110	61	135	101	698	135	235	20	11
5	22	30	35	101	44	114	93	451	156	183	18	10
6	22	28	45	79	46	85	90	311	159	156	17	10
7	23	55	200	80	44	87	86	243	280	130	18	10
8	21	50	160	78	35	105	78	251	206	114	30	9.4
9	20	44	120	109	38	74	83	335	570	98	20	9.4
10	124	40	200	183	35	65	93	239	355	86	20	8.9
11	110	40	300	161	33	64	94	196	247	78	17	8.6
12	69	38	240	141	31	63	106	167	189	66	16	8.3
13	55	36	180	167	34	78	358	145	156	60	16	12
14	49	36	150	254	120	62	260	130	130	57	17	18
15	44	35	195	175	75	57	201	143	112	50	19	14
16	40	47	239	107	54	58	269	162	102	45	15	11
17	37	42	209	118	40	459	510	173	91	44	15	10
18	35	34	176	133	35	374	450	203	78	38	15	11
19	33	36	143	126	18	158	542	159	104	36	14	11
20	32	40	139	101	24	122	910	145	116	35	13	9.7
21	30	41	127	91	35	126	514	130	84	33	12	8.9
22	29	37	107	80	36	474	355	112	89	31	12	9.4
23	28	33	87	97	30	439	382	103	340	31	11	8.3
24	28	29	156	87	31	236	363	88	830	35	12	8.3
25	30	30	146	160	30	176	302	78	674	34	12	8.9
26	29	37	119	75	29	149	247	69	549	36	11	8.9
27	28	35	119	73	27	127	206	62	335	28	18	9.4
28	27	40	124	80	28	114	173	56	239	25	47	8.6
29	26	38	109	77	30	122	164	51	180	24	18	8.3
30	25	70	103	72	-----	117	162	48	500	22	15	11
31	24	-----	94	67	-----	112	-----	140	-----	21	13	-----
TOTAL	1,137	1,167	4,194	3,561	1,256	5,213	7,555	5,853	7,682	2,717	543	307.3
MEAN	36.7	38.9	135	115	43.3	168	252	189	256	87.6	17.5	10.2
MAX	124	70	300	254	120	474	910	698	830	360	47	18
MIN	20	24	35	67	18	57	78	48	78	21	11	8.3
CFSM	.86	.91	3.17	2.70	1.02	3.94	5.92	4.44	6.01	2.06	.41	.24
IN.	.99	1.02	3.66	3.11	1.10	4.55	6.60	5.11	6.71	2.37	.47	.27

CAL YR 1971 TOTAL 29,905.6 MEAN 81.9 MAX 521 MIN 8.5 CFSM 1.92 IN 26.11
 WITH YR 1972 TOTAL 41,187.3 MEAN 113 MAX 910 MIN 8.3 CFSM 2.65 IN 35.97

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-2	1330	4.08	1,450	6-9	0900	3.69	1,010
3-22	2300	3.71	1,040	6-24	0745	4.10	1,470
4-20	1345	4.04	1,400	6-30	1515	3.91	1,250
5-3	2245	3.95	1,300				

NOTE.--No gage-height record Nov. 3 to Dec. 14.

HUDSON RIVER BASIN

221

01334000 Wallonsac River near North Bennington, Vt.

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, on left bank 0.6 mile downstream from Paren Creek and 1.4 miles south of North Bennington.

DRAINAGE AREA.--111 sq mi.

PERIOD OF RECORD.--June 1931 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (from topographic map).

AVERAGE DISCHARGE.--41 years, 213 cfs (26.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,620 cfs May 4 (gage height, 6.42 ft); minimum, 41 cfs Sept. 8, 11, 12, 13; minimum daily, 42 cfs Sept. 8, 12.

Period of record: Maximum discharge, 8,450 cfs Sept. 21, 1938 (gage height, 12.04 ft), from rating curve extended above 2,800 cfs on basis of contracted-opening measurements at gage heights 10.13, 10.49, 11.50, and 12.04 ft and slope-area measurement and computation of flow over dam at gage height 12.04 ft; minimum, 4 cfs Sept. 27, 1932; minimum daily, 21 cfs Sept. 22, 23, 1964, July 12, 1965.

REMARKS.--Records good. Occasional diurnal fluctuation at low flow caused by mills above station; diurnal fluctuation greater prior to 1960. Diversion above station for municipal supply of Bennington and North Bennington since 1961. See table below for figures of diversion.

REVISIONS (WATER YEARS).--WSP 781: 1933(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

D/Y	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	74	160	155	145	161	243	1,020	766	658	97	47
2	66	89	113	169	134	622	271	1,250	425	426	93	46
3	68	105	109	271	131	817	241	1,320	282	440	105	46
4	66	89	113	200	157	375	227	1,940	357	598	98	48
5	68	81	86	175	150	284	211	1,280	322	394	86	51
6	68	77	108	140	150	217	204	788	273	331	81	45
7	78	121	439	155	145	206	207	677	503	279	81	44
8	78	122	306	141	140	257	193	694	610	241	126	42
9	70	94	231	150	135	156	199	1,080	1,020	215	102	46
10	199	87	333	259	125	185	209	696	555	197	92	48
11	516	85	619	269	120	160	218	544	411	192	80	44
12	236	86	474	258	110	186	219	460	332	167	75	42
13	159	97	331	245	160	160	415	405	289	154	74	50
14	134	82	265	443	336	157	496	369	256	154	76	145
15	119	82	264	262	187	153	392	422	227	140	84	123
16	109	111	506	190	155	162	375	451	420	145	71	71
17	100	104	414	190	113	581	724	526	365	241	76	60
18	95	74	304	202	106	710	798	746	256	149	79	55
19	91	103	222	234	113	366	1,130	459	221	131	80	78
20	89	132	231	201	120	268	1,910	401	207	153	67	81
21	86	111	213	182	120	253	1,080	384	188	134	62	59
22	84	107	184	167	114	362	746	325	190	120	57	56
23	82	95	151	242	100	616	856	276	293	190	55	54
24	82	83	223	236	99	402	1,010	248	734	182	63	50
25	91	91	293	288	93	310	877	223	623	209	59	50
26	95	103	219	227	91	271	760	201	767	160	55	51
27	89	132	195	157	97	245	636	189	453	136	53	50
28	84	100	217	175	102	226	569	176	343	118	64	48
29	80	110	204	165	104	225	589	162	279	106	67	46
30	78	233	179	160	-----	241	840	151	666	99	56	52
31	74	-----	168	150	-----	227	-----	267	-----	94	50	-----
TOTAL	3,404	3,058	7,894	6,518	3,852	9,561	16,949	18,130	12,433	6,953	2,364	1,728
MEAN	110	102	255	210	133	308	545	585	414	224	76.3	57.6
MAX	516	233	619	443	336	917	1,910	1,940	1,020	658	126	145
MIN	66	74	86	140	91	153	193	151	188	94	50	42
CFSM	99	92	230	189	120	277	509	527	373	202	69	52
IN	1.14	1.02	2.65	2.18	1.29	3.20	5.68	6.08	4.17	2.33	.79	.58
(†)	2.87	2.74	3.87	3.79	3.36	4.55	4.88	5.08	4.72	3.93	2.94	2.82

CAL YR 1971 TOTAL 77,585 MEAN 213 MAX 1,580 MIN 46 CFSM 1.92 IN 26.30 (†) 3.62
 WYR YR 1972 TOTAL 92,844 MEAN 254 MAX 1,940 MIN 42 CFSM 2.29 IN 31.12 (†) 3.80

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	2400	5.89	2,220				
5-4	0045	6.42	2,620				

† Diversion, in cubic feet per second, for municipal supply of Bennington and North Bennington; records furnished by town of Bennington.

ST. LAWRENCE RIVER BASIN

ST. LAWRENCE RIVER BASIN

04280000 Paultney River below Fair Haven, Vt.

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, on right bank 0.3 mile downstream from Carver Falls, 1.9 miles upstream from Hubbardston River, and 3.2 miles northwest of Fair Haven.

DRAINAGE AREA.--187 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (from topographic map).

AVERAGE DISCHARGE.--44 years, 231 cfs (16.78 inches per year).

E. TREMES.--Current year: Maximum discharge, 3,100 cfs May 5 (gage height, 12.43 ft); minimum daily, 20 cfs Oct. 9, Sept. 26.

Period of record: Maximum discharge, 14,800 cfs July 20, 1945 (gage height, 24.36 ft, from high-water mark in gage well), from rating curve extended above 2,400 cfs on basis of computations of peak flow over dam at gage heights 16.10, 21.40, and 24.36 ft; minimum daily, 2.1 cfs Aug. 8, 1965.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Flow regulated by powerplant above station and by Lake Bomoseen.

REVISIONS (WATER YEARS).--WSP 1114: 1929(M), 1932-35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	162	110	300	330	100	778	458	201	253	250	350
2	47	166	140	350	290	150	863	460	186	173	210	300
3	56	122	120	330	170	1,500	714	653	125	171	180	220
4	28	120	100	285	140	1,100	669	1,250	121	387	200	130
5	47	104	110	260	180	800	569	2,390	172	269	150	90
6	39	92	120	280	190	600	589	1,470	163	218	130	70
7	37	72	150	290	200	520	548	1,140	128	210	120	45
8	39	84	230	260	190	520	490	953	155	158	110	50
9	20	81	320	230	220	560	485	919	188	109	100	50
10	52	78	260	210	180	500	561	867	173	101	110	40
11	213	77	900	240	120	490	619	703	161	495	100	35
12	189	73	1,100	260	110	470	627	667	106	396	84	30
13	149	46	800	260	105	420	840	575	84	261	75	35
14	161	60	600	593	150	350	1,250	463	102	229	80	43
15	114	42	550	480	190	280	971	389	85	190	90	50
16	126	48	911	370	270	230	919	384	124	181	80	40
17	129	60	1,010	310	190	400	1,380	466	171	178	70	32
18	122	52	748	280	150	1,300	1,670	434	107	133	74	28
19	119	48	564	280	150	950	1,390	383	82	97	70	40
20	123	39	470	280	130	650	1,550	351	63	179	84	75
21	114	56	410	260	180	550	1,550	348	51	131	56	70
22	110	68	350	270	150	590	1,200	289	93	111	50	55
23	114	69	290	210	150	1,200	1,120	264	94	237	50	44
24	112	63	310	270	140	970	1,080	137	130	284	56	31
25	126	41	400	350	130	720	1,010	185	254	462	62	23
26	165	42	300	460	125	610	884	164	361	689	64	20
27	179	62	280	400	120	560	787	103	374	605	68	60
28	190	60	270	360	115	508	700	111	275	508	150	33
29	186	70	270	340	110	513	653	102	128	421	500	36
30	173	80	240	330	-----	595	632	56	160	357	650	25
31	167	-----	210	350	-----	594	-----	102	-----	302	500	-----
TOTAL	3,506	2,257	12,643	9,748	4,675	19,250	27,098	17,356	4,621	8,495	4,553	2,150
MEAN	113	75.2	408	314	168	621	903	560	154	274	147	71.7
MAX	213	182	1,100	593	330	1,500	1,670	2,390	374	689	650	350
MIN	20	39	100	210	105	100	485	94	51	57	50	20
CFSM	.60	.40	2.18	1.68	.90	3.32	4.83	2.99	.82	1.47	.79	.38
IN.	.70	.45	2.52	1.54	.57	3.83	5.39	3.45	.92	1.69	.91	.43

CAL YR 1971 TOTAL 93,824.0 MEAN 257 MAX 1,990 MIN 5.2 CFSM 1.37 IN 18.66
WTR YR 1972 TOTAL 116,552.0 MEAN 318 MAX 2,390 MIN 20 CFSM 1.70 IN 23.19

PEAK DISCHARGE (BASE, 2,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0745	12.43	3,100				

NOTE.--No gage-height record Aug. 1 to Sept. 26.

ST. LAWRENCE RIVER BASIN

223

04280300 Mattawee River tributary near Pawlet, Vt.

LOCATION.--Lat 43°19'43", long 73°10'23", Rutland County, on left bank 20 ft downstream from culvert on State Highway 30, 400 ft upstream from mouth, and 1.2 miles south of Pawlet.

DRAINAGE AREA.--2.95 sq mi.

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 3.06 cfs (14.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 53 cfs Dec. 11 (gage height, 3.99 ft), from rating curve extended above 11 cfs; maximum gage height, 5.29 ft Feb. 13 (backwater from ice); minimum discharge, 0.06 cfs Sept. 12, 13.

Period of record: Maximum discharge, 266 cfs July 21, 1967 (gage height, 4.82 ft), from rating curve extended above 19 cfs on basis of measurement of peak flow through culvert; no flow July 25-28, July 31 to Aug. 7, 1964, July 27, 28, Aug. 4, 1965.

REMARKS.--Records poor. Recording rain gage at station since April 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.70	2.9	6.8	4.2	5.0	5.5	4.1	3.9	8.3	6.2	.16
2	.92	.70	2.2	7.0	4.0	25	5.8	3.9	2.2	7.2	5.1	.16
3	.92	.70	2.2	9.0	3.6	15	5.5	8.6	2.0	9.5	7.6	.14
4	.92	.70	2.4	7.6	5.0	12	5.1	18	2.4	9.0	6.2	.14
5	.62	.70	2.0	6.2	5.5	9.0	4.9	19	5.1	8.3	4.9	.12
6	.70	.70	2.4	5.5	4.2	7.0	4.6	17	3.9	7.6	4.6	.10
7	.80	.92	4.6	6.0	4.2	6.0	4.4	16	4.1	6.5	3.9	.09
8	.80	.92	3.9	5.0	3.9	7.2	3.9	14	5.1	5.8	3.4	.07
9	.70	.80	4.6	5.8	3.7	5.8	4.1	17	7.6	5.5	4.1	.13
10	2.9	.80	7.2	9.9	3.6	4.6	3.9	15	6.2	6.2	3.9	.12
11	2.2	.80	25	9.5	3.5	4.9	3.9	14	5.5	13	3.1	.08
12	1.2	.80	25	7.9	3.7	5.1	3.9	13	4.9	6.5	2.6	.07
13	1.2	.80	20	10	9.0	4.9	6.9	12	5.1	6.5	2.0	.08
14	.92	.70	14	9.0	8.0	4.6	7.2	11	4.6	5.8	2.9	.62
15	.80	.80	15	8.0	6.0	5.5	6.2	9.9	4.1	5.1	2.2	.43
16	.80	1.2	16	6.6	4.9	5.5	6.9	2.9	7.9	6.5	1.8	.23
17	.80	.92	15	6.0	4.5	23	9.0	6.2	5.8	9.5	2.4	.16
18	.80	.92	12	7.0	4.2	14	9.5	5.1	5.1	7.9	1.5	.13
19	.80	.92	10	6.6	3.7	9.9	9.5	3.4	4.9	8.3	1.0	3.1
20	.70	1.0	10	6.0	4.0	8.6	15	3.6	4.6	8.3	.55	.92
21	.70	1.0	9.5	5.4	3.9	7.6	20	4.6	3.6	8.3	.43	.34
22	.70	1.2	8.3	5.0	3.7	11	18	4.6	3.9	6.5	.38	.23
23	.70	1.2	7.2	7.0	3.5	11	16	3.6	4.1	12	.49	.20
24	.70	.92	9.9	8.0	3.5	8.6	15	3.1	4.4	9.9	.80	.14
25	.70	1.3	8.6	9.0	3.4	7.2	15	2.9	6.5	10	.62	.10
26	.70	.92	7.9	7.8	3.3	4.4	14	2.4	11	9.9	.49	.12
27	.70	1.3	7.9	6.7	3.3	5.1	13	2.2	8.6	9.0	.38	.13
28	.70	1.4	8.6	6.0	3.3	5.8	12	2.0	7.2	7.6	.62	.13
29	.70	2.0	8.3	5.4	4.0	5.5	11	1.6	8.9	7.6	.34	.16
30	.70	4.1	7.9	4.9	-----	5.1	6.9	1.3	8.6	7.2	.20	.43
31	.70	-----	6.5	4.5	-----	5.5	-----	2.0	-----	6.5	.16	-----
TOTAL	28.12	32.04	289.0	214.3	125.3	259.4	266.6	244.0	150.8	245.8	74.86	9.03
MEAN	.91	1.07	9.32	6.91	4.32	8.37	8.89	7.87	5.33	7.93	2.41	.30
MAX	2.9	4.1	25	10	9.0	25	20	19	11	13	7.6	3.1
MTN	.62	.70	2.9	4.5	3.3	4.4	3.9	1.3	2.0	5.1	.16	.07
CFSM	.31	.36	3.16	2.34	1.46	2.84	3.01	2.47	1.81	2.69	.82	.10
IN.	.35	.40	3.64	2.70	1.58	3.27	3.36	3.08	2.02	3.10	.94	.11

CAL YR 1971 TOTAL 1,270.49 MEAN 3.48 MAX 25 MIN .23 CFSM 1.18 IN 16.02
WTR YR 1972 TOTAL 1,949.25 MEAN 5.32 MAX 25 MIN .07 CFSM 1.80 IN 24.57

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-11	1245	3.99	53				
3-2	-	-	148				
3-17	0630	3.72	47				
5-4	1615	3.69	44				
7-11	0230	3.97	49				

† About.

ST. LAWRENCE RIVER BASIN

04281500 East Creek at Rutland, Vt.

LOCATION.--Lat 43°37'43", long 72°59'22", Rutland County, on left bank on grounds of Rutland Country Club, at Rutland, 280 ft downstream from Grove Street Bridge and 2 miles upstream from mouth.

DRAINAGE AREA.--51.1 sq mi.

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 95.9 cfs (25.49 inches per year), adjusted for diversion and storage.

EXTREMES.--Current year: Maximum discharge, 1,120 cfs May 4 (gage height, 3.74 ft), from rating curve extended above 490 cfs on basis of computation of flow over dam and slope-area measurement at gage height 7.10 ft; minimum daily, 17 cfs Aug. 22, 23, Sept. 17, 23, 24. Period of record: Maximum discharge, 36,500 cfs June 3, 1947 (gage height, 20.3 ft, from high-water mark in gage house), mean of two slope-area measurements, caused by failure of East Pittsford Dam 5.8 miles upstream; minimum daily, 3.1 cfs Nov. 8, 1947.

REMARKS.--Records good. Diversion above station from Mendon Brook for municipal supply of Rutland. Flow regulated by powerplants and by Chittenden Reservoir 11 miles upstream (usable capacity, 819,800,000 cu ft); prior to June 3, 1947, also regulated by East Pittsford Reservoir (usable capacity, 150,000,000 cu ft). See table below for figures of diversion and monthend contents in Chittenden Reservoir.

REVISIONS (WATER YEARS).--WSP 1307: 1941-42(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	72	76	61	109	107	172	293	169	89	169	65
2	22	69	78	41	109	255	126	378	151	44	111	26
3	22	72	67	125	32	350	142	490	96	76	53	18
4	21	72	40	96	72	217	152	702	54	120	49	18
5	61	65	23	96	33	87	144	477	99	120	37	67
6	72	22	63	99	27	123	140	256	47	120	34	94
7	64	49	120	109	109	115	136	249	101	117	44	92
8	53	96	80	41	99	189	132	217	104	56	44	84
9	22	60	54	37	106	175	54	224	130	33	23	26
10	56	71	117	120	101	170	122	189	58	89	34	18
11	133	72	213	125	94	154	140	197	84	242	29	96
12	74	63	136	120	30	43	141	161	84	139	22	96
13	69	28	125	150	34	116	178	123	27	104	25	94
14	59	18	120	179	145	161	189	110	51	109	31	96
15	53	84	109	65	142	160	157	165	74	38	33	89
16	26	69	199	49	130	172	141	182	136	36	26	22
17	20	74	154	151	109	304	266	256	69	106	23	17
18	42	63	96	125	109	201	254	232	34	101	29	94
19	59	65	40	142	36	54	325	174	106	109	21	106
20	74	44	105	139	29	135	347	122	96	143	21	104
21	67	29	114	117	101	138	245	112	106	125	23	94
22	54	82	109	46	101	173	178	131	87	128	17	89
23	30	47	101	58	76	209	268	124	117	250	17	17
24	20	67	128	125	89	155	289	123	111	179	21	17
25	27	21	74	195	89	96	255	106	74	310	34	92
26	47	37	49	142	59	67	223	106	122	306	44	94
27	67	33	111	125	37	125	203	49	120	230	54	109
28	72	30	133	122	92	139	186	47	120	213	154	99
29	53	84	125	53	101	141	202	44	120	195	96	82
30	20	80	120	38	101	154	235	94	117	182	151	27
31	19	-----	78	111	-----	152	-----	111	-----	179	101	-----
TOTAL	1,629	1,749	3,162	3,153	2,500	4,542	5,742	6,244	2,864	4,293	1,570	2,040
MEAN	52.5	58.3	102	102	86.2	159	191	201	95.5	138	50.6	68.0
MAX	130	96	213	191	145	350	347	702	165	310	169	109
MIN	19	13	23	37	27	43	54	44	27	33	17	17
(†)	5.83	5.19	5.94	6.39	6.44	6.40	6.43	6.54	6.66	6.95	7.01	6.61
(‡)	537.4	496.9	513.3	429.6	343.5	273.8	407.2	589.5	588.5	546.5	572.5	434.6
MEAN††	37.2	47.9	114	76.8	58.3	140	249	276	102	130	67.4	21.4
CFSM††	.73	.94	2.23	1.50	1.14	2.74	4.87	5.40	2.00	2.54	1.32	.42
IN.††	.84	1.05	2.57	1.73	1.23	3.15	5.44	6.23	2.22	2.93	1.52	.47
CAL YR 1971	TOTAL 33,199	MEAN 90.9	MAX 436	MIN 17	MEAN† 99.0	CFSM†† 1.94	IN†† 26.32					
WTR YR 1972	TOTAL 39,388	MEAN 109	MAX 702	MIN 17	MEAN† 110	CFSM†† 2.15	IN†† 29.39					

† Diversion, in cubic feet per second, from Mendon Brook for municipal supply of Rutland; records furnished by city of Rutland.
 ‡ Monthend contents, in millions of cubic feet, in Chittenden Reservoir; records furnished by Central Vermont Public Service Corp.
 †† Adjusted for diversion and change in contents in Chittenden Reservoir.

ST. LAWRENCE RIVER BASIN

225

04282000 Otter Creek at Center Rutland, Vt.

LOCATION.--Lat 43°36'13", long 73°00'49", Rutland County, on right bank 500 ft upstream from bridge on U.S. Highway 4 at Center Rutland, 200 ft downstream from dam, 1.2 miles downstream from East Creek, and 1.5 miles west of Rutland.

DRAINAGE AREA.--307 sq mi.

PERIOD OF RECORD.--May 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.80 ft above mean sea level; prior to Oct. 1, 1964, datum was 1.00 ft higher. Prior to July 22, 1929, nonrecording gage at same site.

AVERAGE DISCHARGE.--44 years, 530 cfs (23.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,960 cfs May 5 (gage height, 10.07 ft); minimum daily, 106 cfs Oct. 4.
Period of record: Maximum discharge, 13,700 cfs Sept. 22, 1938 (gage height, 13.45 ft, present datum), from rating curve extended above 7,400 cfs on basis of computation of peak flow over dam; minimum daily, 45 cfs Sept. 21, 1947, Aug. 7, 1965.

REMARKS.--Records good. Flow regulated by powerplants and Chittenden Reservoir 14 miles upstream on East Creek (usable capacity, 819,800,000 cu ft); prior to June 3, 1947, also regulated by East Pittsford Reservoir (usable capacity, 150,000,000 cu ft). See table with station 04281500 for month- and contents in Chittenden Reservoir.

REVISIONS (WATER YEARS).--WSP 1084: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	169	314	300	345	295	650	1,990	745	884	536	194
2	118	174	255	317	334	833	732	2,650	846	651	464	134
3	111	194	231	448	313	1,620	646	3,100	549	565	456	125
4	106	190	236	474	311	1,270	617	4,360	438	933	561	123
5	131	193	159	420	302	807	559	5,110	516	721	459	158
6	159	141	205	340	260	610	534	3,150	442	594	361	192
7	171	179	364	280	308	540	517	2,130	432	525	337	186
8	157	272	527	260	354	628	489	1,830	448	425	311	182
9	112	245	471	280	312	623	425	1,710	635	374	291	133
10	180	223	615	350	296	493	494	1,720	601	398	315	121
11	521	214	1,100	440	259	469	524	1,430	517	1,990	264	176
12	416	201	1,170	500	204	371	540	1,230	442	1,980	228	187
13	291	168	852	600	223	400	705	1,020	346	931	220	185
14	236	148	663	650	529	436	908	920	334	695	238	236
15	296	192	574	550	585	416	767	987	332	534	277	270
16	174	205	844	430	576	445	779	1,120	634	435	235	167
17	152	225	1,090	390	441	904	1,420	1,440	541	573	214	139
18	197	214	773	418	398	1,260	1,910	1,700	439	485	225	182
19	180	209	444	527	276	1,030	2,130	1,280	412	442	213	236
20	174	221	499	592	223	692	2,880	987	432	600	194	270
21	186	211	554	476	248	623	2,740	915	394	494	182	222
22	164	255	498	340	304	669	1,960	805	341	451	154	207
23	143	207	299	410	240	1,150	1,780	686	564	1,110	155	125
24	127	185	471	416	258	933	2,060	609	1,030	1,190	180	114
25	136	143	622	752	283	690	3,170	545	1,340	1,490	177	168
26	199	159	499	804	287	570	1,950	489	1,330	1,950	185	195
27	211	215	510	548	231	554	1,640	416	1,040	1,610	186	280
28	199	227	535	491	263	536	1,340	380	727	1,100	437	200
29	172	270	567	397	275	538	1,410	341	591	828	259	185
30	148	312	459	330	-----	608	1,650	349	553	672	290	172
31	130	-----	295	368	-----	580	-----	391	-----	576	224	-----
TOTAL	5,745	6,150	16,587	14,107	9,241	21,478	36,916	45,780	18,091	26,206	8,827	5,458
MEAN	185	205	538	455	319	696	1,231	1,477	603	845	285	182
MAX	521	312	1,170	804	580	1,620	2,880	5,110	1,340	1,990	561	280
MIN	106	141	159	260	204	295	425	341	332	374	154	114
CFSM	.60	.67	1.75	1.48	1.04	2.27	4.01	4.81	1.96	2.75	.93	.59
IN.	.70	.75	2.02	1.71	1.12	2.61	4.47	5.55	2.19	3.18	1.07	.66
CAL YR 1971	TOTAL 175,637	MEAN 481	MAX 2,880	MIN 93	CFSM 1.57	IN 21.28						
WTR YR 1972	TOTAL 214,786	MEAN 587	MAX 5,110	MIN 106	CFSM 1.91	IN 26.03						

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0230	10.07	5,960				

04282500 Otter Creek at Middlebury, Vt.

LOCATION.--Lat 44°00'47", long 73°10'06", Addison County, on right bank 150 ft upstream from highway bridge in Middlebury, and 3.5 miles downstream from Middlebury River.

DRAINAGE AREA.--628 sq mi.

PERIOD OF RECORD.--April 1903 to April 1907, October 1910 to January 1920, October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft above mean sea level. Apr. 1, 1903, to Apr. 30, 1907, and Oct. 5, 1910, to Jan. 31, 1920, nonrecording gage at site 1,800 ft upstream at datum 10 ft lower, and Oct. 1, 1928, to Oct. 17, 1933, at present datum.

AVERAGE DISCHARGE.--56 years (1903-6, 1910-19, 1928-72), 950 cfs (20.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,290 cfs May 8 (gage height, 6.67 ft); minimum daily, 171 cfs Oct. 4.
Period of records: Maximum discharge, 11,000 cfs Mar. 20, 21, 1936 (gage height, 10.3 ft); minimum daily, 92 cfs Aug. 9, 1965.
Maximum discharge since at least 1830, 13,600 cfs Nov. 4, 1927 (gage height, 13.3 ft, present datum, at site 1,800 ft upstream), from rating curve extended above 9,000 cfs.

REMARKS.--Records good. Some regulation by Chittenden Reservoir (usable capacity, 819,800,000 cu ft) on East Creek; see table with station 04281500 for monthend contents. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 434: 1903-4. WSP 684: 1913(M), drainage area. WSP 1114: 1913. WSP 1207: 1929, 1931.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	221	560	760	619	458	1,800	3,100	800	1,220	1,840	539
2	275	278	504	617	599	587	1,810	3,080	1,190	1,250	1,660	464
3	187	330	445	559	579	1,460	1,800	3,270	1,260	1,170	1,500	346
4	171	304	460	692	557	1,520	1,790	3,490	1,060	1,330	1,320	317
5	314	295	340	770	540	1,530	1,710	4,000	903	1,390	1,190	322
6	266	290	326	740	490	1,510	1,600	4,290	874	1,320	579	382
7	253	275	506	650	450	1,480	1,470	4,910	799	1,140	816	381
8	253	324	724	570	500	1,410	1,330	5,260	819	961	513	376
9	288	414	862	510	530	1,360	1,210	5,120	921	814	853	392
10	228	406	1,080	503	500	1,280	1,150	4,760	1,020	726	760	329
11	444	375	1,600	657	490	1,150	1,150	4,350	964	1,030	723	288
12	705	359	1,730	801	460	1,020	1,200	3,970	848	1,540	692	381
13	690	326	1,730	904	383	855	1,130	3,690	749	1,670	533	346
14	502	260	1,720	1,130	498	780	1,590	3,410	647	1,720	525	331
15	463	256	1,650	1,180	771	782	1,660	3,210	571	1,700	596	359
16	402	305	1,660	1,090	953	782	1,770	3,030	760	1,540	627	412
17	287	310	1,660	850	918	1,050	1,930	2,830	1,030	1,290	581	375
18	261	345	1,640	736	793	1,620	2,110	2,670	992	1,130	503	278
19	361	422	1,540	799	664	1,630	2,200	2,540	811	1,000	524	354
20	340	437	1,270	939	530	1,640	2,380	2,440	730	1,230	478	441
21	313	392	1,150	970	470	1,660	2,440	2,380	697	1,190	409	456
22	281	385	1,100	893	440	1,780	2,520	2,270	664	1,060	426	401
23	273	437	1,250	752	450	2,080	2,690	2,150	686	1,390	382	366
24	242	447	950	826	470	2,070	2,870	2,020	864	1,800	376	301
25	220	391	920	1,170	458	2,100	2,990	1,850	1,230	1,820	408	243
26	235	235	930	1,300	440	2,200	3,070	1,630	1,480	1,970	454	291
27	321	293	890	1,250	440	2,270	3,110	1,340	1,560	1,990	410	318
28	323	369	886	1,100	393	2,240	3,140	1,030	1,580	2,000	907	375
29	310	386	920	981	438	2,070	3,150	794	1,500	2,020	1,210	376
30	304	486	1,040	807	-----	1,920	3,140	662	1,240	2,020	520	366
31	243	-----	880	669	-----	1,820	-----	631	-----	1,970	680	-----
TOTAL	10,079	10,346	32,943	26,185	15,703	46,154	62,110	90,177	29,291	44,401	24,185	10,906
MEAN	325	345	1,063	845	541	1,489	2,070	2,909	976	1,432	780	364
MAX	705	486	1,730	1,300	953	2,270	3,150	5,260	1,580	2,020	1,840	539
MIN	171	221	326	503	383	458	1,150	631	571	726	376	243
CFSM	.52	.55	1.69	1.35	.86	2.37	3.30	4.63	1.55	2.28	1.24	.58
IN.	.60	.61	1.55	1.55	.93	2.73	3.68	5.34	1.74	2.63	1.43	.65

CAL YR 1971 TOTAL 335,952 MEAN 920 MAX 3,440 MIN 171 CFSM 1.47 IN 19.90
WTR YR 1972 TOTAL 402,480 MEAN 1,100 MAX 5,260 MIN 171 CFSM 1.75 IN 23.84

ST. LAWRENCE RIVER BASIN

227

04282700 Lewis Creek tributary at Starkboro, Vt.

LOCATION.--Lat 44°12'59", long 73°03'21", Addison County, on right bank 25 ft downstream from culvert on State Highway 116, 0.3 mile upstream from mouth, and 0.7 mile south of Starkboro.

DRAINAGE AREA.--5.31 sq mi.

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 6.45 cfs (16.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 611 cfs July 23 (gage height, 4.71 ft), from rating curve extended above 97 cfs; maximum gage height, 5.14 ft Mar. 4 (ice jam); minimum discharge, 0.49 cfs Oct. 6.
Period of record: Maximum discharge, 721 cfs Sept. 6, 1971 (gage height, 4.81 ft), from rating curve extended above 97 cfs; maximum gage height, 5.14 ft Mar. 4, 1972 (ice jam); minimum discharge, 0.14 cfs Sept. 21-25, 27, 1964.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Recording rain gage at station since July 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.60	2.5	3.2	2.1	1.3	14	65	4.5	10	9.5	1.1
2	.61	2.0	2.1	3.5	1.9	5.0	16	124	4.8	4.1	8.4	1.0
3	.64	1.1	2.6	3.1	1.9	14	15	105	4.3	5.4	19	1.0
4	.62	1.1	2.4	2.8	2.2	12	14	204	4.0	5.8	12	1.0
5	.42	1.0	2.3	2.4	2.3	9.0	13	144	4.3	4.0	9.5	1.0
6	.55	.96	2.3	2.2	1.9	9.0	12	49	4.1	11	7.8	.95
7	.64	4.0	7.8	2.3	1.9	9.0	14	31	9.5	29	8.9	.90
8	.64	2.9	7.0	2.3	1.7	9.0	12	23	9.4	35	8.4	1.2
9	.45	2.3	7.0	2.2	1.5	7.0	10	14	13	30	7.2	1.1
10	1.7	2.1	9.0	2.3	1.4	5.5	10	14	13	44	4.1	1.0
11	7.5	2.1	17	2.5	1.3	4.5	11	14	12	85	5.0	.90
12	2.0	2.1	10	2.7	1.3	5.0	13	13	9.5	44	4.3	.85
13	1.5	2.1	9.0	3.0	2.5	5.5	19	12	4.8	31	4.0	1.2
14	1.2	1.9	7.0	3.5	3.5	5.4	26	12	5.0	29	5.0	1.1
15	1.2	1.9	7.8	3.0	2.8	4.5	32	12	24	27	4.3	.95
16	1.1	2.1	12	2.5	2.7	4.3	44	12	71	26	3.2	.85
17	1.0	1.7	9.0	2.3	2.5	15	47	11	20	35	2.9	.80
18	.95	2.1	7.0	2.6	2.2	25	59	9.5	14	30	3.6	1.2
19	.90	3.5	5.0	2.9	2.0	15	140	8.4	12	90	4.0	1.4
20	.84	4.0	6.0	2.6	1.8	14	80	7.2	9.0	37	2.9	1.0
21	.64	3.3	5.0	2.4	1.4	13	45	6.5	6.8	34	2.3	.92
22	.49	2.8	3.4	2.3	1.5	14	38	5.6	5.4	27	1.6	.92
23	.40	2.3	3.0	2.2	1.4	30	50	4.8	6.5	89	1.3	.84
24	.40	2.1	4.0	2.2	1.4	14	45	4.3	13	131	1.4	.84
25	1.1	2.3	3.8	3.5	1.3	16	33	3.8	11	57	1.3	.76
26	1.4	2.8	3.4	3.2	1.3	14	24	3.3	10	51	1.6	.76
27	1.2	2.2	3.0	3.0	1.2	12	24	3.0	7.2	39	1.2	.94
28	1.1	2.7	4.0	2.8	1.4	11	22	2.7	4.8	27	1.4	.76
29	1.0	2.7	3.6	2.4	1.2	11	24	2.5	6.5	20	1.3	.76
30	.95	2.9	2.7	2.4	-----	12	47	2.3	8.4	16	1.2	.84
31	.92	-----	3.7	2.3	-----	14	-----	2.3	-----	12	1.1	-----
TOTAL	36.13	67.96	173.0	82.8	53.7	350.0	1,005	1,149.2	344.7	1,791.3	152.3	20.14
MEAN	1.17	2.27	5.58	2.67	1.65	11.3	33.5	37.1	11.5	35.2	4.91	.97
MAX	7.5	4.0	17	3.5	3.5	30	140	105	71	171	19	1.8
MIN	.52	.90	2.1	2.2	1.2	1.3	10	2.3	4.0	4.0	1.1	.76
CFSM	.22	.43	1.05	.50	.35	2.13	6.31	4.99	2.17	4.63	.92	.19
IN.	.25	.44	1.21	.59	.34	2.45	7.04	8.05	2.41	7.45	1.07	.20

CAI YD 1971 TOTAL 2,882.79 MEAN 7.90 MAX 140 MTN .29 CFSM 1.49 IN 20.20
WTD YD 1972 TOTAL 4,535.23 MEAN 12.4 MAX 305 WTN .52 CFSM 2.34 IN 31.77

PEAK DISCHARGE (BASE, 100 CFS)

NOTE.--No gage-height record July 15-19.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-17	1545	4.02	160	6-15	2245	4.30	295
4-19	1415	4.21	246	7-19	unknown	-	†300
5-3	1300	4.55	470	7-23	2300	4.71	611

† About.

ST. LAWRENCE RIVER BASIN

04284000 Jail Branch at East Barre, Vt.

LOCATION.--Lat 44°09'30", long 72°26'44", Washington County, on right bank 1,400 ft upstream from highway bridge, at East Barre, 1,400 ft downstream from East Barre Detention Reservoir, and 4.2 miles upstream from mouth. Prior to Aug. 8, 1972, at site 1,500 ft downstream.

DRAINAGE AREA.--38.9 sq mi. Area at site used prior to Aug. 8, 1972, 40.4 sq mi.

PERIOD OF RECORD.--August 1920 to September 1923, October 1933 to current year. October 1933 monthly discharge only, published in WSP 1307. Prior to October 1922, published as Jail Brook at East Barre.

GAGE.--Water-stage recorder. Datum of gage is 1,107.25 ft above mean sea level. Aug. 14, 1920, to Sept. 30, 1923, nonrecording gage at site 0.1 mile downstream at different datum. Nov. 1, 1933, to Jan. 25, 1935, nonrecording gage and Jan. 26, 1935, to Aug. 7, 1972, water-stage recorder at site 1,500 ft downstream. Datum of gage was 1,071.59 ft above mean sea level Nov. 1, 1933, to Sept. 30, 1964, and 1,069.59 ft above mean sea level Oct. 1, 1964, to Aug. 7, 1972 (levels by Corps of Engineers).

AVERAGE DISCHARGE.--42 years, 52.0 cfs (17.48 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 628 cfs May 4 (gage height, 3.61 ft, site and datum then in use); maximum gage height, 4.27 ft (site and datum then in use) Jan. 27 (backwater from ice); minimum discharge, 2.2 cfs Sept. 6, 7.

Period of record: Maximum discharge, 1,820 cfs Oct. 1, 1920 (gage height, 9.50 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 900 cfs; minimum, 0.1 cfs Aug. 18, 1950, Aug. 3, 4, 31, Sept. 1, 3, 1953. Maximum discharge since construction of East Barre Detention Reservoir in 1935, 634 cfs Apr. 19, 1969 (gage height, 3.31 ft, site and datum then in use); maximum gage height, 6.35 ft (site and datum then in use) Feb. 17, 1939 (ice jam).

REMARKS.--Records good except those for winter period, which are fair. Discharge affected by East Barre Detention Reservoir since 1935 (see p. 230). Prior to 1964, occasional diurnal fluctuation at low flow caused by mill above station. Diversion from reservoir on Orange Brook, a tributary above station, for city of Barre.

REVISIONS (WATER YEARS).--WSP 564: 1922. WSP 1034: Drainage area. WSP 1307: 1921-23(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.6	12	15	13	9.0	75	418	83	33	8.5	3.0
2	5.6	9.3	13	15	13	13	90	431	94	24	8.0	2.7
3	4.5	12	14	15	13	28	82	445	63	36	17	2.7
4	4.5	10	15	15	13	31	64	526	42	96	20	2.7
5	4.3	9.3	14	15	14	21	58	564	45	36	15	2.7
6	4.3	8.2	13	14	13	17	54	550	31	25	11	2.5
7	4.8	17	13	14	12	16	52	544	44	21	11	2.5
8	4.8	20	14	13	12	17	50	520	38	14	18	4.3
9	4.3	13	15	13	12	16	51	496	54	13	15	6.0
10	21	12	18	13	11	15	52	460	51	12	14	4.8
11	75	13	40	13	10	14	54	418	40	29	9.1	4.0
12	29	11	45	13	9.5	14	65	375	29	14	8.5	3.0
13	17	13	35	15	10	13	77	275	24	12	8.5	3.0
14	14	11	29	17	13	13	71	168	21	10	9.1	4.0
15	12	12	25	18	15	14	76	188	18	10	17	5.0
16	9.7	11	35	15	14	20	147	172	79	8.2	9.1	4.0
17	9.7	11	40	14	12	40	183	155	48	9.0	7.0	3.5
18	9.0	11	29	14	11	60	234	129	28	7.9	7.5	3.2
19	7.9	14	22	15	10	65	266	86	23	9.4	12	4.5
20	7.2	21	20	15	9.5	48	359	78	22	16	8.5	5.7
21	6.9	16	19	14	10	45	245	78	20	25	6.1	4.5
22	7.6	14	18	14	9.5	48	222	69	21	24	5.3	3.5
23	6.6	12	18	14	9.0	120	245	61	22	27	4.5	3.0
24	6.3	11	19	15	9.0	100	299	57	78	107	4.2	3.0
25	10	9.2	20	16	9.0	75	279	48	76	34	4.2	4.2
26	17	14	20	18	8.5	62	260	43	168	25	3.8	6.1
27	14	14	19	16	8.5	52	222	39	86	18	7.8	6.1
28	13	13	18	15	8.5	48	222	35	43	15	14	5.7
29	11	12	17	14	8.5	48	310	31	29	13	8.0	4.2
30	9.3	12	14	14	-----	67	375	27	23	11	5.3	4.2
31	9.3	-----	16	13	-----	57	-----	30	-----	9.3	3.8	-----
TOTAL	368.9	378.6	664	454	320.5	1,206.0	4,841	7,518	1,443	745.8	292.8	118.3
MEAN	11.9	12.6	21.4	14.6	11.1	38.9	161	243	48.1	24.1	9.45	3.94
MAX	75	21	45	18	15	170	175	564	168	197	20	6.1
MIN	4.3	8.2	12	13	8.5	9.0	50	27	18	7.9	3.8	2.5
MEAN†	10.5	12.9	21.9	14.7	11.0	40.5	172	230	47.9	23.7	9.41	3.94
CFSM†	.26	.32	.54	.36	.27	1.00	4.26	5.69	1.19	.59	.24	.10
IN.†	.30	.36	.62	.42	.29	1.16	4.76	6.57	1.32	.68	.28	.11
CAL YR 1971 TOTAL	16,681.7	MEAN 45.7	MAX 519	MIN 2.0	MEAN† 45.8	CFSM† 1.13	IN† 15.38					
WTR YR 1972 TOTAL	18,350.9	MEAN 50.1	MAX 564	MIN 2.5	MEAN† 50.0	CFSM† 1.24	IN† 16.87					

† Adjusted for change in contents in East Barre Detention Reservoir.

04285500 North Branch Winooki River at Wrightsville, Vt.

LOCATION.--Lat 44°17'58", long 72°34'45", Washington County, on right bank at Wrightsville, 0.8 mile downstream from Wrightsville Detention Reservoir and 3.5 miles upstream from mouth.

DRAINAGE AREA.--69.2 sq mi.

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 550.53 ft above mean sea level (levels by Corps of Engineers). Prior to Nov. 21, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 128 cfs (25.12 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 940 cfs May 4 (gage height, 3.89 ft); minimum daily, 7.3 cfs Sept. 24, 25.

Period of record: Maximum discharge, 2,170 cfs Apr. 12, 1934 (gage height, 6.53 ft), from rating curve extended above 920 cfs; minimum daily, 0.2 cfs Aug. 13, 1941. Maximum discharge since construction of Wrightsville Detention Reservoir in 1935, 1,040 cfs Mar. 21, 1936 (gage height, 4.32 ft); maximum gage height, 5.43 ft Mar. 12, 1936 (ice jam).

Maximum discharge since at least 1830, 17,200 cfs Nov. 3, 1927, by computation of peak flow over dam 0.8 mile above gage.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Discharge affected since 1935 by Wrightsville Detention Reservoir (see following page). Occasional diurnal fluctuation at low flow caused by small mill above station; more frequent diurnal fluctuation prior to 1968.

REVISIONS (WATER YEARS).--WSP 1237: 1934-39.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	38	61	62	52	37	201	665	103	94	35	12
2	27	41	51	60	48	48	244	736	180	83	30	11
3	26	61	56	64	46	43	226	820	117	62	75	10
4	26	56	60	62	51	145	189	870	103	67	128	9.9
5	25	51	58	61	57	144	168	907	251	53	81	9.6
6	25	46	57	60	55	105	157	905	128	44	52	9.0
7	24	86	61	57	47	91	141	911	176	39	46	8.5
8	24	135	67	56	46	83	128	914	135	35	68	8.6
9	24	92	69	55	43	77	130	907	196	36	70	11
10	45	74	74	54	41	74	135	889	211	40	57	12
11	200	69	166	53	39	71	150	871	159	172	44	10
12	100	64	280	56	38	68	161	850	113	82	36	9.4
13	65	61	193	57	39	65	203	827	88	51	35	8.8
14	55	54	146	66	41	61	198	805	71	41	33	10
15	52	49	126	75	46	61	203	794	59	36	33	11
16	48	52	182	69	48	80	315	775	271	32	27	10
17	42	46	251	64	45	120	378	752	280	96	23	10
18	40	49	167	58	42	180	470	725	122	85	26	9.3
19	43	53	105	62	40	190	534	693	86	61	41	9.7
20	40	99	110	72	38	150	603	656	76	98	35	11
21	38	102	114	65	41	135	610	614	68	138	25	10
22	36	82	100	64	40	135	609	567	69	222	20	9.2
23	35	65	99	60	39	274	608	511	56	124	17	8.0
24	34	43	97	63	38	338	600	442	69	266	16	7.3
25	40	52	97	64	37	312	592	353	114	155	15	7.3
26	66	52	89	75	37	204	584	137	210	115	14	7.7
27	60	59	80	66	36	159	568	61	179	103	13	9.6
28	52	60	82	62	36	144	553	53	120	86	19	9.2
29	47	59	83	57	36	140	562	47	106	63	21	8.3
30	45	63	74	56	-----	169	604	41	78	51	17	15
31	39	-----	68	55	-----	163	-----	40	-----	41	13	-----
TOTAL	1,450	1,913	3,323	1,911	1,242	4,106	10,824	19,138	3,994	2,671	1,165	292.4
MEAN	46.8	63.8	107	61.6	42.8	132	361	617	133	86.2	37.6	9.75
MAX	200	135	280	75	57	338	610	914	280	266	128	15
MIN	24	38	51	53	36	37	128	40	56	32	13	7.3
MEAN†	46.9	64.2	107	61.8	42.3	134	429	550	134	85.5	37.2	10.1
CFSMT	.68	.93	1.55	.89	.61	1.94	6.20	7.95	1.94	1.24	.54	.15
IN.†	.78	1.04	1.78	1.03	.66	2.23	6.92	9.17	2.16	1.43	.62	.16

CAL YR 1971 TOTAL 42,957.2 MEAN 118 MAX 690 MIN 3.9 MEAN† 118 CFSMT 1.71 IN† 23.10
WTR YR 1972 TOTAL 52,029.4 MEAN 142 MAX 914 MIN 7.3 MEAN† 142 CFSMT 2.05 IN† 27.97

† Adjusted for change in contents in Wrightsville Detention Reservoir.

NOTE.--No gage-height record Oct. 2 to Nov. 3.

Reservoirs in Winooksi River basin above Montpelier, Vt.

04283500. EAST BARRE DETENTION RESERVOIR.--Lat 44°09'18", long 72°26'42", Washington County, at dam on Jail Branch at East Barre, 4.5 miles upstream from mouth. Drainage area, 38.8 sq mi. Period of record, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Aug. 30, 1960, nonrecording gage, and Aug. 30 to Sept. 30, 1960, water-stage recorder, at present site at datum 1,127.9 ft above mean sea level. Maximum elevation for current year, 1,150.68 ft May 5. Maximum elevation for period of record, 1,163.9 ft, present datum, Mar. 22, 1936.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control. Usable capacity of reservoir, 525,000,000 cu ft between elevation 1,124.9 ft (bottom of outlet opening) and 1,165.0 ft (crest of spillway). Dam has no gates; below elevation 1,165.0 ft, outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction modifications completed in November 1959. Size of opening since enlargement, height, 7 ft and average width, 3.7 ft. Figures given herein represent usable contents.

04285000. WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, at dam on North Branch Winooksi River at Wrightsville, 0.3 mile downstream from Long Meadow Brook and 4.2 miles upstream from mouth. Drainage area, 66.5 sq mi. Period of record, November 1935 to February 1936 (in WSP 1307), March to May 1936 (in WSP 798), June 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to July 28, 1960, nonrecording gage, and July 28 to Sept. 30, 1960, water-stage recorder, at present site at datum 612.75 ft above mean sea level. Extremes for current year: Maximum elevation, 676.28 ft May 8; minimum, 620.00 ft Sept. 24-26. Extremes for period of record: Maximum elevation, 676.4 ft, present datum, Mar. 22, 1936, from graph based on gage readings; minimum observed, 613.0 ft Aug. 17, 1949, and Aug. 17-19, 1950.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control; modification of intake-structure works to create a recreational pool completed in June 1965. Usable capacity for recreation, 22,000,000 cu ft between elevations 612.75 ft (bottom of outlet opening) and 620.00 ft for flood control, 851,500,000 cu ft between elevations 620.00 ft and 685.00 ft (crest of spillway); total usable capacity, 873,500,000 cu ft. Dam has no gates; below elevation 685.00 ft, outflow from reservoir is dependent on capacity of outlet opening, 5.25 ft square near base of dam. Figures given herein represent usable contents.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972				
Date	Elevation (feet)	Contents (millions of cubic feet)	Change in contents	
			Millions of cubic feet	Equivalent, cubic feet per second
04283500 East Barre Detention Reservoir				
Sept. 30.....	1,131.09	7.0	-	-
Oct. 31.....	1,128.06	3.3	-3.7	-1.38
Nov. 30.....	1,128.68	4.0	+7	+27
Dec. 31.....	1,129.70	5.2	+1.2	+45

CAL YR 1971.....	-	-	+1.5	+05

Jan. 31.....	1,129.83	5.5	-1	-04
Feb. 29.....	1,129.72	5.2	-1	-04
Mar. 31.....	1,132.88	9.6	+4.4	+1.64
Apr. 30.....	1,140.32	37.6	+28.0	+10.8
May 31.....	1,129.1	4.5	-33.1	-12.4
June 30.....	1,128.8	4.1	-4	-15
July 31.....	1,127.90	3.1	-1.0	-37
Aug. 31.....	1,127.86	3.0	-1	-04
Sept. 30.....	1,127.80	3.0	0	0

WTR YR 1972.....	-	-	-4.0	-13

04285000 Wrightsville Detention Reservoir				
Sept. 30.....	620.29	23.2	-	-
Oct. 31.....	620.39	23.5	+0.3	+11
Nov. 30.....	620.68	24.7	+1.2	+46
Dec. 31.....	620.60	24.4	-0.3	-11

CAL YR 1971.....	-	-	+0.8	+03

Jan. 31.....	620.7	24.8	-4	-15
Feb. 29.....	620.38	23.5	-1.3	-52
Mar. 31.....	621.28	27.1	+3.6	+1.34
Apr. 30.....	645.10	203.4	+176.3	+68.0
May 31.....	620.37	23.5	-179.9	-67.2
June 30.....	620.76	25.0	+1.5	+58
July 31.....	620.33	23.3	-1.7	-63
Aug. 31.....	620.08	22.3	-1.0	-37
Sept. 30.....	620.32	23.3	+1.0	+39

WTR YR 1972.....	-	-	+0.1	+003

* Estimated.

ST. LAWRENCE RIVER BASIN

231

04286000 Winouaki River at Montpelier, Vt.

LOCATION.--Lat 44°15'23", long 72°35'36", Washington County, on right bank 0.4 mile upstream from Dog River and 1 mile downstream from depot at Montpelier.

DRAINAGE AREA.--397 sq mi.

PERIOD OF RECORD.--May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 499.99 ft above mean sea level. Prior to June 16, 1914, nonrecording gage at site 0.9 mile upstream at different datum. June 16 to July 3, 1914, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--53 years (1914-23, 1928-72), 569 cfs (19.46 inches per year), adjusted for storage since October 1935.

EXTREMES.--Current year: Maximum discharge, 9,580 cfs May 4 (gage height, 14.14 ft); minimum daily, 76 cfs Sept. 24, 29.

Period of record: Maximum discharge, 17,200 cfs Apr. 7, 1912 (gage height, 17.31 ft, from floodmarks, present datum), from rating curve extended above 6,900 cfs; minimum daily, 17 cfs Sept. 3, 1933.

Maximum discharge since at least 1830, 57,000 cfs Nov. 3, 1927 (gage height, 27.1 ft), from rating curve extended above 6,900 cfs.

REVISIONS.--The figures of maximum discharge for some water years have been revised as shown in the following table. They supersede figures published in WRD Mass., N.H., R.I., Vt., 1969-71.

Water year	Date	Discharge (cfs)	Gage height (feet)
1969	Apr. 19, 1969	7,910	12.62
1970	Apr. 18, 1970	5,810	10.53
1971	May 4, 1971	7,240	11.96

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated by several small powerplants above station, by Peacham Pond and, since 1926, by Malletts Falls Reservoir (combined usable capacity, 492,000,000 cu ft), which regulate runoff from 24 sq mi, and by East Barre and Wrightsville Detention Reservoirs since 1935 (see preceding page). See table below for monthend contents in Peacham Pond and Malletts Falls Reservoir. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 424: 1915. WSP 894: Drainage area. WSP 1437: 1912-14(M), 1915-18, 1919(M), 1920, 1921(M), 1922-23, 1929, 1933, 1934(M), 1936, 1937(M), 1938, 1946(M). The figures of peak discharge for water year 1970 have been revised as shown in the following table. They supersede figures published in WRD Mass., N.H., R.I., Vt., 1970.

REVISED PEAK DISCHARGE.--1970: Apr. 18 (0345) 5,810 cfs (10.53 ft); Apr. 25 (0100) 5,660 cfs (10.38 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	162	230	320	300	265	1,060	3,590	565	368	198	133
2	157	190	240	320	290	400	1,130	4,590	756	338	184	120
3	131	268	270	340	290	640	1,080	6,180	657	361	282	99
4	126	271	260	360	310	660	873	6,710	450	605	364	95
5	124	257	230	360	320	600	810	7,060	712	373	298	95
6	122	230	290	320	270	430	756	4,400	525	282	210	111
7	120	254	350	330	280	440	706	4,100	662	271	198	105
8	138	373	370	330	270	440	651	3,680	620	250	309	91
9	126	298	350	310	280	410	651	3,210	792	214	301	103
10	217	261	400	300	250	400	723	2,900	824	261	261	116
11	734	257	717	290	230	390	824	2,630	610	436	214	105
12	431	250	810	290	220	390	804	2,450	480	330	184	97
13	286	240	620	330	230	350	1,080	2,150	418	243	172	91
14	240	194	545	390	290	370	1,050	1,890	382	230	175	97
15	236	181	495	410	380	390	1,030	1,970	350	214	181	105
16	210	210	679	330	390	400	1,630	1,950	635	187	181	105
17	181	175	866	320	360	570	2,270	1,820	762	247	147	99
18	170	187	605	400	320	900	2,680	1,660	427	290	152	91
19	167	201	413	360	290	920	3,000	1,520	364	223	223	89
20	178	286	450	380	230	640	3,460	1,380	386	355	187	91
21	184	305	510	360	230	620	2,850	1,290	359	391	157	107
22	184	261	455	320	270	640	2,590	1,160	404	723	140	85
23	170	220	350	320	260	1,000	2,640	1,060	360	470	128	80
24	144	165	420	350	250	1,700	2,760	943	413	943	124	76
25	170	150	380	410	250	1,250	2,590	786	530	560	142	85
26	261	190	420	520	260	1,000	2,450	600	873	460	131	85
27	271	220	360	430	220	850	2,220	450	712	480	124	85
28	233	230	400	420	230	750	2,070	404	470	359	149	83
29	217	225	430	390	275	700	2,480	373	391	305	181	76
30	201	230	370	330	-----	901	3,010	342	325	250	147	80
31	167	-----	350	290	-----	871	-----	342	-----	217	140	-----
TOTAL	6,475	6,945	13,635	10,930	8,045	21,087	52,018	73,590	16,222	11,036	5,984	2,880
MEAN	209	232	440	353	277	680	1,734	2,374	541	356	193	96.0
MAX	734	373	866	520	390	1,000	3,460	7,060	873	943	364	133
MIN	120	150	230	290	220	265	651	342	325	187	124	76
(1)	404.7	391.4	316.0	258.0	159.0	46.8	204.6	436.8	419.6	433.3	402.1	380.3
MEAN†	204	227	412	331	237	641	1,874	2,381	535	360	181	91.1
CFSM†	.51	.57	1.04	.83	.60	1.61	4.72	6.00	1.35	.91	.46	.23
IN.†	.59	.64	1.20	.96	.64	1.86	5.27	6.92	1.50	1.05	.53	.26

CAL YR 1971 TOTAL 204,686 MEAN 561 MAX 6,670 MIN 82 MEANS 561 CFSM† 1.41 IN† 19.20
WTR YR 1972 TOTAL 228,847 MEAN 625 MAX 7,060 MIN 76 MEANS 624 CFSM† 1.57 IN† 21.41

PEAK DISCHARGE (BASE, 3,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2400	14.14	9,580				

† Monthend contents, in millions of cubic feet, in Peacham Pond and Malletts Falls Reservoir; records furnished by Green Mountain Power Corp.

‡ Adjusted for change in contents in Peacham Pond, Malletts Falls Reservoir, and East Barre and Wrightsville Detention Reservoirs.

ST. LAWRENCE RIVER BASIN

04287000 Dog River at Northfield Falls, Vt.

LOCATION.--Lat 44°10'58", long 72°38'27", Washington County, on right bank 1 mile downstream from Northfield Falls, and 1.2 miles downstream from Cox Branch.

DRAINAGE AREA.--76.1 sq mi.

PERIOD OF RECORD.--October 1934 to current year. October 1934 monthly discharge only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--38 years, 117 cfs (20.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,990 cfs May 4 (gage height, 7.84 ft), from rating curve extended above 1,500 cfs as explained below; minimum, 16 cfs Sept. 24.

Period of record: Maximum discharge, 9,750 cfs Sept. 21, 1938 (gage height, 11.53 ft), from rating curve extended above 1,500 cfs on basis of computation of flow over dam at gage height 8.49 ft and slope-area measurements at gage heights 8.96 and 11.53 ft; minimum, 4.3 cfs Aug. 31, Sept. 7, 1942.

REMARKS.--Records good except those for winter period, which are fair. Infrequent diurnal fluctuation at low flow by powerplant above station; regulation much greater prior to 1955.

REVISIONS (WATER YEARS).--WSP 1237: 1935-37.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	32	61	105	86	66	237	1,100	102	106	49	22
2	27	38	48	103	77	105	269	1,280	95	61	44	21
3	28	49	60	97	77	148	239	1,560	81	82	60	20
4	27	43	57	97	82	145	214	2,030	74	153	57	20
5	26	40	52	81	72	115	197	1,530	87	91	46	20
6	26	39	64	73	70	100	188	829	72	77	41	19
7	28	63	74	86	68	105	176	880	84	66	41	18
8	29	70	81	81	72	104	163	614	75	60	59	18
9	27	57	76	80	66	93	160	486	87	59	50	22
10	61	53	84	82	64	88	173	395	87	53	44	22
11	119	53	202	78	61	96	187	341	77	68	39	21
12	60	51	213	79	60	91	207	305	68	53	35	19
13	56	51	159	78	61	88	251	269	62	47	33	19
14	49	46	137	89	83	86	243	244	56	45	35	19
15	44	44	129	89	79	84	254	293	52	43	41	20
16	40	45	266	84	75	85	448	248	65	38	33	19
17	36	44	262	94	66	133	694	278	68	40	31	18
18	34	45	177	100	65	209	760	225	53	35	32	18
19	38	49	135	98	60	160	927	197	50	34	41	20
20	34	60	130	92	61	130	920	173	53	56	33	22
21	32	58	132	88	66	133	635	164	49	55	26	19
22	31	57	100	88	65	164	561	140	46	59	27	19
23	30	52	100	86	63	406	580	125	45	87	25	17
24	29	39	121	86	63	310	601	110	108	301	24	16
25	41	42	120	110	59	234	611	100	115	132	24	19
26	53	53	108	100	59	200	566	93	120	104	23	19
27	46	60	101	94	61	177	499	86	89	89	23	19
28	40	60	105	92	58	162	488	79	77	77	44	19
29	38	60	99	91	58	165	699	72	82	68	35	17
30	34	65	84	90	-----	186	929	66	72	62	27	20
31	33	-----	91	89	-----	186	-----	66	-----	53	23	-----
TOTAL	1,233	1,518	3,628	2,769	1,957	4,554	13,066	14,358	2,259	2,384	1,148	581
MEAN	39.8	50.6	117	89.3	67.5	147	436	483	75.3	76.9	37.0	19.4
MAX	119	70	266	110	86	406	929	2,030	120	301	60	22
MIN	26	32	48	73	58	56	160	66	45	34	23	16
CFSM	.52	.46	1.54	1.17	.89	1.93	5.73	6.08	.49	1.01	.49	.25
1%	.60	.74	1.77	1.35	.96	2.23	6.39	7.02	1.10	1.17	.56	.28

CAL YR 1971 TOTAL 45,222.4 MEAN 124 MAX 1,720 MIN 9.7 CFSM 1.63 IN 22.11
WTR YR 1972 TOTAL 49,455.0 MEAN 135 MAX 2,030 MIN 16 CFSM 1.77 IN 24.11

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	1945	7.84	4,990				

ST. LAWRENCE RIVER BASIN

233

04267300 Sonny Brook near Montpelier, Vt.

LOCATION.--Lat 44°16'08", long 72°37'37". Washington County, on left bank 20 ft upstream from culvert on U. S. Highway 2, 1,000 ft upstream from mouth, and 2.5 miles west of Montpelier.

DRAINAGE AREA.--2.31 sq mi.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 510 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 2.95 cfs (17.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 123 cfs May 4 (gage height, 5.00 ft); minimum, 0.06 cfs Sept. 24.

Period of record: Maximum discharge, 322 cfs May 20, 1969 (gage height, 7.23 ft), from rating curve extended above 55 cfs on basis of computation of peak flow through culvert; minimum, 0.01 cfs Aug. 19-22, 1964.

REMARKS.--Records fair. Recording rain gage at station since April 1964 (no winter records).

DISCHARGE IN CUBIC FEET PER SECOND--AFTER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.32	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
9	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
10	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
11	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
12	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
14	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
15	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
16	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
17	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
18	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
19	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
20	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
21	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
22	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
23	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
24	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
25	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
26	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
27	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
28	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
29	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
30	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
31	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
TOTAL	13.57	33.44	10.40	33.31	33.31	167.5	490.6	308.40	31.87	26.14	8.92	3.63
MEAN	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
MAX	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
MIN	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
CFS	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
IN	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

CAL YR 1971 TOTAL 1,292.79 MEAN 3.54 MAX 61 MIN 1.07 CFSM 1.53 IN 20.82
 WTR YR 1972 TOTAL 1,263.13 MEAN 3.45 MAX 60 MIN 1.06 CFSM 1.49 IN 20.34

PEAK DISCHARGE (BASE, 55 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	1500	4.12	70				
9-4	1700	5.00	123				

ST. LAWRENCE RIVER BASIN

04288000 Mad River near Moretown, Vt.

LOCATION.--Lat 44°16'42", long 72°44'37", Washington County, on left bank at downstream side of highway bridge, 2.4 miles downstream from town, and 3.8 miles upstream from mouth.

DRAINAGE AREA.--139 sq mi.

PERIOD OF RECORD.--July to November 1910, October 1928 to current year. October 1928 monthly discharge only, published in WSP 1307

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1933. Datum of gage is 543.93 ft above mean sea level (levels by Vermont Department of Highways). July 6 to Nov. 4, 1910, nonrecording gage at same site at different datum. Nov. 20, 1928, to Sept. 27, 1930, nonrecording gage at same site at present datum.

AVERAGE DISCHARGE.--44 years (1928-72), 245 cfs (23.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,840 cfs May 4 (gage height, 10.20 ft), from rating curve extended above 2,100 cfs as explained below; minimum, 30 cfs Sept. 18; minimum daily, 31 cfs Sept. 18.

Period of record: Maximum discharge, 18,400 cfs Sept. 22, 1938 (gage height, 16.34 ft, from floodmarks), from rating curve extended above 2,700 cfs on basis of computations of flow over dam at gage heights 9.98, 11.51, 16.34, and 19.4 ft; minimum, 1.4 cfs Oct. 1, 1930.

Maximum discharge since at least 1830, 23,000 cfs Nov. 3, 1927 (gage height, 19.4 ft, from floodmarks), by computation of peak flow over dam.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1938. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 744: Drainage area. WSP 854: 1934(M) WSP 1114: 1929, 1930(M), 1936-37

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	66	105	210	160	120	450	2,000	200	351	122	43
2	55	86	90	200	145	200	390	2,670	312	216	102	41
3	55	120	125	190	145	300	340	4,360	216	170	256	41
4	53	91	115	170	150	240	314	3,950	190	307	197	41
5	51	85	100	155	135	210	291	2,960	222	177	134	42
6	51	80	120	145	130	190	276	1,520	185	142	107	38
7	51	148	150	160	125	220	255	2,060	251	175	118	35
8	51	159	170	170	135	200	231	1,330	183	101	172	37
9	51	118	150	160	125	180	231	995	291	117	131	45
10	121	106	170	160	120	170	269	783	254	102	112	42
11	322	107	450	150	115	180	290	713	224	180	95	36
12	146	100	350	150	115	180	332	644	166	107	83	36
13	109	99	290	150	115	165	399	637	138	85	79	34
14	92	86	260	170	140	160	443	706	118	82	94	47
15	83	95	240	170	150	160	454	818	104	77	114	41
16	80	85	520	165	130	160	900	678	196	76	79	36
17	74	80	440	180	120	230	1,200	644	151	213	71	33
18	69	84	300	190	115	400	1,210	527	112	103	78	31
19	66	111	260	190	115	290	1,530	460	104	144	110	102
20	65	150	250	175	115	210	1,600	402	106	345	77	68
21	64	130	230	170	125	205	1,040	368	90	195	65	47
22	62	110	210	170	120	210	883	315	84	184	59	40
23	60	100	170	165	120	640	974	259	94	420	55	36
24	58	80	200	165	120	450	1,040	225	381	470	55	34
25	58	90	230	210	115	350	944	162	314	524	54	38
26	115	110	240	190	115	290	854	168	282	515	51	38
27	97	130	190	190	120	260	762	150	193	520	48	49
28	83	115	200	175	115	250	739	134	194	338	88	42
29	76	110	190	175	115	250	1,040	118	251	245	67	37
30	72	120	170	175	-----	280	1,450	104	152	183	53	71
31	64	-----	180	170	-----	280	-----	104	-----	143	46	-----
TOTAL	2,547	3,141	6,865	5,355	3,665	7,630	21,131	31,044	5,785	7,947	2,978	1,302
MEAN	82.2	105	221	173	126	246	704	1,001	193	256	95.1	43.4
MAX	322	159	520	210	160	640	1,600	4,360	381	1,470	256	102
MIN	51	66	90	145	115	120	231	104	84	76	46	31
CFSM	69	76	159	174	91	177	506	720	139	184	69	31
IN	68	94	184	143	98	204	566	831	155	213	80	35

CAL YR 1971 TOTAL 54,470 MEAN 259 MAX 3,330 MIN 23 CFSM 1.96 IN 25.28
WTR YR 1972 TOTAL 59,394 MEAN 272 MAX 4,360 MIN 31 CFSM 1.96 IN 26.60

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2200	10.20	7,840				
7-24	0100	7.05	3,410				

ST. LAWRENCE RIVER BASIN

235

04288500 Waterbury Reservoir near Waterbury, Vt.

LOCATION.--Lat 44°22'54", long 72°46'13", Washington County, at dam on Little River, 2.7 miles upstream from mouth and 3.5 miles north of Waterbury.

DRAINAGE AREA.--109 sq mi.

PERIOD OF RECORD.--September 1937 to current year. September 1937 to August 1938 monthend contents only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Dec. 10, 1938, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum elevation, 597.93 ft May 8; minimum, 540.54 ft Apr. 12.

Period of record: Maximum elevation, 613.45 ft May 4, 1940; minimum observed, 501.3 ft Oct. 16, 1938.

REMARKS.--Reservoir is formed by earthfill dam completed by Corps of Engineers during summer of 1937 for flood control and storage of water for power. Usable capacity for storage of water for power, 1,582,700,000 cu ft between elevations 500.0 and 592.0 ft (sill of tainter gate) above mean sea level; for flood control, 1,229,600,000 cu ft between elevations 592.0 and 617.5 ft (crest of spillway) above mean sea level; total usable capacity, 2,812,300,000 cu ft.

Capacity table (elevation, in feet, and contents, in millions of cubic feet)

540.0	302.7	580.0	1,168.5
550.0	461.7	590.0	1,505.0
560.0	658.8	600.0	1,913.4
570.0	891.9		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	589.50	590.05	589.69	589.68	586.26	573.21	551.05	573.03	590.53	590.31	589.28	587.10
2	589.61	589.86	589.43	589.91	585.89	572.74	550.30	578.99	590.35	590.40	589.21	587.19
3	589.69	589.73	589.29	589.72	585.55	573.37	549.18	586.00	590.68	589.94	590.35	587.25
4	589.47	589.65	589.44	589.49	585.22	573.93	547.91	591.46	591.00	590.31	590.38	587.31
5	589.36	589.68	589.57	589.18	585.11	574.35	546.52	595.61	591.27	590.02	589.88	587.00
6	589.22	589.62	589.33	587.71	584.92	573.89	544.99	596.43	590.98	589.81	589.98	586.66
7	589.15	590.00	589.36	587.20	584.50	573.26	543.47	597.92	590.68	589.58	589.72	586.62
8	589.59	589.93	589.61	587.08	583.73	572.99	541.95	596.96	590.27	589.72	589.45	586.73
9	589.46	589.85	589.89	587.18	583.33	572.38	542.73	595.65	590.20	589.88	589.16	586.83
10	589.00	589.76	589.37	586.70	582.96	571.43	541.31	596.71	590.82	589.89	589.79	586.90
11	589.69	589.52	591.83	586.67	582.55	570.64	540.98	594.04	591.16	589.62	588.56	586.94
12	590.00	589.45	591.06	584.74	582.32	570.07	540.74	593.49	590.93	589.36	588.76	587.00
13	590.20	589.61	591.70	586.69	582.22	570.03	540.99	593.44	590.78	589.31	588.93	587.04
14	590.22	589.79	591.78	586.90	581.78	568.51	541.18	593.61	590.42	589.32	588.75	587.12
15	590.20	589.93	591.49	587.11	581.31	567.28	541.90	593.90	591.41	589.49	588.48	587.17
16	590.32	589.28	591.19	587.03	580.96	566.63	544.07	593.34	594.09	589.70	588.60	587.22
17	590.43	589.13	591.28	586.38	580.67	565.68	546.35	593.00	592.97	590.48	588.53	587.28
18	590.11	589.02	591.43	586.35	579.97	564.85	548.77	592.69	592.16	590.29	588.72	587.33
19	590.16	589.06	591.31	586.71	579.88	563.65	544.20	592.39	591.36	590.22	588.98	587.45
20	590.09	589.57	591.09	586.69	579.84	562.41	557.88	592.02	590.50	590.01	589.10	587.53
21	589.98	589.87	591.02	586.56	579.15	561.00	559.45	591.60	589.59	590.00	588.88	587.58
22	589.92	589.85	590.78	586.74	578.33	559.47	560.54	591.12	589.05	590.51	588.78	587.65
23	589.91	589.77	590.35	587.01	577.53	559.95	561.67	590.64	589.29	590.48	588.67	587.69
24	590.03	589.53	590.11	586.94	576.93	559.33	562.75	590.56	588.51	590.39	588.43	587.75
25	590.20	589.77	590.11	587.18	576.16	558.26	563.45	590.39	589.00	590.37	588.23	587.79
26	590.18	589.82	590.18	587.11	576.03	557.01	563.89	590.16	589.40	590.60	588.30	587.76
27	590.16	589.98	590.80	586.92	575.72	555.64	564.09	590.43	589.86	591.12	588.41	587.79
28	590.09	590.16	590.73	586.72	574.78	554.18	564.33	590.66	590.16	590.96	588.38	587.68
29	590.01	590.08	590.68	586.80	574.01	554.04	565.66	590.88	590.28	590.33	588.13	587.72
30	590.15	589.92	590.15	586.00	572.92	552.92	568.51	590.67	590.25	589.83	587.80	587.88
31	590.24	589.86	589.86	586.63	571.81	551.81	568.55	590.65	589.55	587.43	587.43	587.43
MEAN	589.44	589.69	590.33	587.15	580.94	565.36	551.69	591.50	590.57	590.06	588.87	587.30
MAX	590.43	590.16	591.96	589.91	586.26	574.35	568.51	597.92	594.09	591.12	590.38	587.88
MIN	588.88	589.03	588.86	584.35	574.01	551.81	540.74	573.03	588.29	589.31	587.43	586.62
(†)	1,514.3	1,502.1	1,464.6	1,385.6	997.6	495.7	855.8	1,530.2	1,514.6	1,489.0	1,414.0	1,429.9
(‡)	+8.51	-4.71	-14.0	-29.5	-155	-187	+139	+252	-6.02	-9.56	-28.0	+6.13
CAL YR 1971	MEAN 583.06	MAX 594.23	MIN 540.56	(†) +2.80								
WTR YR 1972	MEAN 583.66	MAX 597.92	MIN 540.74	(‡) -1.95								

† Contents, in millions of cubic feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

ST. LAWRENCE RIVER BASIN

04289000 Little River near Waterbury, Vt.

LOCATION.--Lat 44°22'12", long 72°46'11", Washington County, on right bank 1 mile downstream from Waterbury Reservoir, 1.7 miles upstream from mouth, and 2.5 miles north of Waterbury.

DRAINAGE AREA.--111 sq mi.

PERIOD OF RECORD.--July to October 1910 (gauge heights only), October 1935 to current year. October, November 1935 monthly discharge only, published in WSP 1307. Prior to October 1962, published as Waterbury River near Waterbury.

GAGE.--Water-stage recorder. Concrete control since Dec. 8, 1937. Datum of gage is 428.00 ft above mean sea level (levels by Corps of Engineers). July 7 to Oct. 31, 1910, nonrecording gage at site 2 miles upstream at different datum.

AVERAGE DISCHARGE.--37 years, 227 cfs (27.77 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,150 cfs May 8 (gauge height, 10.92 ft); minimum daily, 9.4 cfs Sept. 23, 24.

Period of record: Maximum discharge, 6,520 cfs Mar. 18, 1936 (gauge height, 19.38 ft); minimum daily, 0.6 cfs several times during summers of 1938-39, 1941, and 1944. Maximum discharge since construction of Waterbury Reservoir in 1937, 4,080 cfs Dec. 9, 1937 (gauge height, 14.88 ft).

REMARKS.--Records good. Flow completely regulated by Waterbury Reservoir (see preceding page).

REVISIONS (WATER YEARS).--WSP 824: 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	137	190	161	222	316	485	565	309	172	202	172
2	11	163	176	17	206	311	484	590	310	105	116	14
3	11	151	157	179	215	75	481	621	13	320	93	14
4	132	105	15	168	227	43	480	627	185	31	365	13
5	94	138	16	273	102	43	476	611	222	236	417	167
6	107	12	199	254	133	269	473	864	314	192	92	174
7	94	14	101	294	229	296	434	1,330	357	194	259	53
8	154	157	16	137	344	212	458	1,660	363	12	274	14
9	11	127	16	45	211	291	23	1,460	364	12	275	14
10	126	126	18	270	156	367	416	1,140	14	122	274	13
11	94	149	22	110	203	340	274	944	104	254	187	14
12	12	155	176	68	138	13	293	812	267	207	13	15
13	12	12	364	128	105	352	274	732	213	93	12	17
14	77	12	154	90	250	518	321	751	264	73	170	14
15	89	150	335	30	268	431	302	1,000	259	11	186	14
16	11	174	461	125	221	292	329	1,000	989	12	13	12
17	11	130	274	349	241	430	485	834	1,000	121	97	12
18	111	108	108	110	249	511	493	723	660	213	17	11
19	128	60	156	19	126	509	512	653	568	356	14	21
20	103	13	254	142	86	457	512	559	572	303	13	11
21	99	13	186	163	308	502	521	578	572	381	162	9.9
22	104	127	209	16	345	503	522	522	374	29	97	9.6
23	12	111	275	15	325	508	524	477	491	328	97	9.4
24	12	144	242	139	262	503	527	243	120	465	146	9.4
25	13	13	156	99	303	500	530	242	33	2.8	134	12
26	125	65	105	140	132	498	532	237	128	269	14	57
27	103	14	237	164	154	496	532	13	15	331	14	18
28	103	14	227	182	157	496	535	13	60	310	97	76
29	99	143	240	60	316	251	546	13	104	4.5	160	12
30	12	91	270	14	-----	476	557	180	177	348	176	12
31	12	-----	223	212	-----	485	-----	106	-----	228	199	-----
TOTAL	2,175	2,828	5,568	4,194	6,450	11,294	13,326	20,163	9,431	6,461	4,379	1,014.3
MEAN	70.2	94.3	180	135	224	364	444	650	314	208	141	33.8
MAX	154	174	461	349	577	518	557	1,660	1,000	465	417	174
MIN	11	12	15	14	86	13	23	13	13	11	12	9.4
MEAN†	78.7	89.6	166	106	68.9	177	583	902	308	199	113	39.9
CFSMT	.71	.81	1.50	.95	.62	1.59	5.25	8.13	2.77	1.79	1.02	.36
IN.†	.82	.90	1.72	1.10	.67	1.83	5.86	9.37	3.10	2.07	1.18	.40

CAL YR 1971 TOTAL 80,405.9 MEAN 220 MAX 1,270 MIN 9.9 MEAN† 223 CFSMT 2.01 IN† 27.29
 WTR YR 1972 TOTAL 87,313.3 MEAN 239 MAX 1,660 MIN 9.4 MEAN† 237 CFSMT 2.14 IN† 29.02

† Adjusted for change in contents in Waterbury Reservoir.

ST. LAWRENCE RIVER BASIN

237

04290500 Winooski River near Essex Junction, Vt.

LOCATION.--Lat 44°28'44", long 73°08'21", Chittenden County, on right bank 0.5 mile downstream from Muddy Brook and 2 miles southwest of Essex Junction.

DRAINAGE AREA.--1,044 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 185 ft (from topographic map); prior to Oct. 1, 1964, datum was 1.00 ft higher.

AVERAGE DISCHARGE.--44 years, 1,634 cfs (21.26 inches per year), adjusted for storage since October 1938.

EXTREMES.--Current year: Maximum discharge, 27,400 cfs May 5 (gage height, 16.87 ft); minimum daily, 42 cfs Sept. 30.

Period of record: Maximum discharge, 45,300 cfs Mar. 19, 1936 (gage height, 24.54 ft, present datum), from rating curve extended above 27,000 cfs on basis of computations of flow over dam at gage heights 19.72, 24.54, and 51.4 ft and slope-area measurement at gage height 51.4 ft (all at present datum); minimum daily, 24 cfs Sept. 7, 1968.

Maximum discharge since at least 1830, 113,000 cfs Nov. 4, 1927 (gage height, 51.4 ft, present datum, from floodmarks), from rating curve extended above 27,000 cfs by method explained above.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants above station, by Peacham Pond and Mallets Falls Reservoir (combined usable capacity, 492,000,000 cu ft), by Waterbury Reservoir since 1937 (see p. 235), and by East Barre and Wrightsville Detention Reservoirs since 1935 (see p. 230). See table with station 04286000 for monthend contents in Peacham Pond and Mallets Falls Reservoir.

REVISIONS (WATER YEARS).--WSP 714: 1930(M). WSP 894: Drainage area. WSP 1307: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	401	405	960	800	740	4,370	10,500	994	1,240	734	445
2	340	473	731	930	860	1,000	4,670	12,600	1,450	1,310	832	288
3	340	449	635	840	800	1,000	4,090	19,600	1,670	1,070	1,400	233
4	395	487	644	900	860	2,300	3,670	21,700	1,140	1,500	1,510	276
5	311	453	450	940	1,100	1,650	3,250	25,300	1,720	1,310	1,460	368
6	455	565	603	960	660	1,300	3,000	14,600	1,450	930	930	440
7	301	550	976	960	1,000	1,400	2,400	12,500	1,480	804	840	371
8	470	925	1,200	640	950	1,300	2,300	11,000	1,590	632	975	243
9	370	940	1,100	800	900	1,400	2,200	9,000	1,700	680	1,110	187
10	615	684	1,400	900	850	1,350	2,440	7,200	2,210	704	948	282
11	1,370	740	2,200	840	760	1,200	3,010	6,200	1,450	858	864	253
12	1,210	765	2,800	770	660	1,100	2,900	5,800	1,550	1,050	627	257
13	465	511	2,100	750	640	1,000	4,100	5,230	1,430	808	445	260
14	511	474	1,700	1,000	800	1,250	4,750	4,980	1,040	594	592	241
15	409	639	1,400	1,150	920	1,200	4,370	5,360	1,140	514	682	252
16	602	536	2,030	900	1,150	1,250	6,430	5,400	7,410	400	652	213
17	302	401	3,070	1,100	950	1,700	7,670	5,050	3,640	1,450	628	180
18	450	612	2,440	1,000	850	3,700	9,380	4,610	2,240	1,240	637	333
19	575	648	1,260	950	700	3,400	9,280	3,800	1,400	804	378	211
20	569	952	1,280	1,000	620	2,600	11,400	3,350	1,310	1,440	373	248
21	444	919	1,250	950	640	2,300	9,040	3,020	1,540	1,540	582	298
22	471	913	1,410	900	880	2,400	8,270	2,740	1,210	1,310	423	320
23	440	772	1,000	900	900	5,600	8,140	2,390	1,320	1,540	419	178
24	127	594	1,000	930	840	6,000	8,550	2,060	1,310	6,060	548	134
25	412	455	1,200	1,100	820	4,300	8,110	1,760	1,810	3,390	537	275
26	525	537	1,100	1,300	760	3,400	7,770	1,470	1,790	3,150	374	404
27	674	590	1,050	1,150	640	2,900	7,340	1,180	1,750	3,630	264	250
28	827	558	1,100	1,050	720	2,840	6,610	948	1,730	2,500	494	229
29	544	737	1,100	1,050	830	2,800	7,440	800	1,160	1,880	531	183
30	419	943	1,200	850	-----	3,240	8,740	744	1,120	1,520	591	42
31	301	-----	1,050	800	-----	3,700	-----	832	-----	993	436	-----
TOTAL	14,280	20,246	41,624	29,530	23,860	72,480	175,960	211,614	53,194	47,090	21,818	7,934
MEAN	455	675	1,343	953	823	2,338	5,865	6,826	1,773	1,519	704	244
MAX	1,370	952	3,070	1,300	1,150	6,000	11,400	25,300	7,410	6,060	1,510	445
MIN	187	455	450	750	620	780	2,200	744	994	400	264	42
MEAN†	529	666	1,301	902	628	2,112	6,144	7,085	1,761	1,514	664	266
CFSM†	.51	.64	1.25	.86	.60	2.02	5.89	6.79	1.69	1.45	.64	.25
IN.†	.58	.71	1.44	1.00	.65	2.33	6.57	7.83	1.88	1.67	.73	.28

CAL YR 1971 TOTAL 613,882 MEAN 1,682 MAX 17,600 MIN 128 MEAN† 1,685 CFSM† 1.61 INT 21.92
WTR YR 1972 TOTAL 721,630 MEAN 1,972 MAX 25,300 MIN 42 MEAN† 1,969 CFSM† 1.89 INT 25.68

PEAK DISCHARGE (BASE, 12,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	0830	9.45	12,700				
5-5	1400	16.87	27,400				

† Adjusted for change in contents in Peacham Pond, Mallets Falls Reservoir, East Barre and Wrightsville Detention Reservoirs, and Waterbury Reservoir. Records of monthend contents in Peacham Pond and Mallets Falls Reservoir furnished by Green Mountain Power Corp.

04292000 Lamolle River at Johnson, Vt.

LOCATION.--Lat 44°37'22", long 72°40'50"; Lamolle County, on right bank above falls, 0.7 mile upstream from bridge in Johnson, and 0.8 mile upstream from Gihon River.

DRAINAGE AREA.--310 sq. mi.

PERIOD OF RECORD.--July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, February 1913), September 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 495 ft (from topographic map). Prior to Dec. 31, 1913, nonrecording gage at bridge 0.7 mile downstream at different datum.

AVERAGE DISCHARGE.--46 years (1911-13, 1928-72), 516 cfs (22.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,750 cfs May 5 (gage height, 13.59 ft); minimum, 43 cfs Sept. 13; minimum daily, 89 cfs Sept. 12. Period of record: Maximum discharge, 13,000 cfs Mar. 18, 1936 (gage height, 16.48 ft), from rating curve extended above 8,500 cfs on basis of computation of peak flow over dam; minimum, 11 cfs Sept. 2, 1935; minimum daily, 16 cfs Oct. 26, 1947.

REMARKS.--Records excellent except those for winter period, which are fair. Some regulation by powerplant above station.

REVISIONS (WATER YEARS).--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	161	298	255	270	155	630	4,160	307	280	188	138
2	188	166	280	230	250	180	720	4,780	604	334	188	114
3	171	168	260	278	225	300	700	6,270	515	331	697	109
4	140	249	295	290	215	450	660	6,030	414	310	882	114
5	143	243	335	270	220	450	630	7,400	1,270	294	485	131
6	171	231	345	250	225	440	599	3,640	690	260	344	127
7	211	330	330	260	225	400	558	3,770	696	217	277	111
8	229	480	320	260	210	360	522	3,140	652	178	277	115
9	229	379	350	270	225	370	423	2,250	765	175	372	123
10	213	345	410	260	210	340	500	1,860	1,060	176	351	117
11	776	255	760	270	240	300	572	1,510	780	557	278	116
12	536	255	1,080	300	230	290	585	1,400	591	462	222	89
13	385	273	780	255	200	310	775	1,280	464	300	174	132
14	277	260	635	245	200	330	870	1,290	387	307	189	168
15	177	225	500	330	240	280	835	1,470	280	279	210	172
16	185	260	527	390	290	250	1,340	1,360	3,200	275	196	178
17	199	245	900	380	260	380	1,600	1,180	1,500	824	166	218
18	172	236	626	340	190	600	2,280	985	758	555	179	156
19	167	257	500	290	180	640	2,970	871	511	380	172	159
20	210	415	331	340	200	600	3,600	723	411	458	177	182
21	243	375	236	330	200	620	2,350	646	373	1,820	189	182
22	243	385	319	310	175	650	2,140	559	321	2,390	176	180
23	195	190	367	290	170	700	2,130	441	277	904	149	180
24	145	160	257	325	165	1,000	2,230	377	288	668	149	170
25	222	145	415	360	160	840	2,000	286	299	700	175	176
26	303	225	518	380	155	740	1,850	208	563	918	164	179
27	326	245	487	400	155	660	1,630	226	631	645	170	173
28	311	215	415	360	155	410	1,411	227	437	449	191	174
29	235	170	390	310	155	400	2,130	229	393	423	177	161
30	166	210	350	280	-----	640	3,130	221	323	362	174	159
31	163	-----	305	260	-----	620	-----	219	-----	226	149	-----
TOTAL	7,519	7,753	13,913	9,360	5,995	14,705	42,369	59,008	19,760	16,437	7,887	4,503
MEAN	243	258	449	302	207	474	1,412	1,903	654	530	254	150
MAX	776	480	1,080	400	290	1,000	3,600	7,400	3,200	2,390	882	218
MIN	140	145	236	230	155	155	423	208	277	175	149	89
CFSM	.78	.93	1.45	.97	.67	1.53	4.55	6.14	2.13	1.71	.82	.48
IN.	.90	.93	1.67	1.12	.72	1.76	5.08	7.08	2.37	1.97	.95	.56

CAL YR 1971 TOTAL 201,138 MEAN 551 MAX 5,500 MIN 123 CFSM 1.78 IN 24.14
WTR YR 1972 TOTAL 209,209 MEAN 572 MAX 7,400 MIN 89 CFSM 1.85 IN 25.11

PEAK DISCHARGE (BASE, 5,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0700	13.59	8,750				

ST. LAWRENCE RIVER BASIN

239

04292100 Stony Brook near Eden, Vt.

LOCATION.--Lat 44°41'38", long 72°35'00", Lamoille County, on right bank 20 ft downstream from bridge on State Highway 100, 500 ft upstream from mouth, and 2 miles southwest of Eden.

DRAINAGE AREA.--4.21 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 890 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 9.72 cfs (31.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 480 cfs May 4 (gage height, 3.49 ft), from rating curve extended above 250 cfs; maximum gage height, 4.89 ft Mar. 18 (backwater from ice); minimum discharge, 1.2 cfs Sept. 22-24.

Period of record: Maximum discharge, 480 cfs May 4, 1972 (gage height, 3.49 ft), from rating curve extended above 250 cfs; maximum gage height, 4.89 ft Mar. 18, 1972 (backwater from ice); minimum discharge, 0.40 cfs Sept. 24, 1964.

REMARKS.--Records good except those for winter period and those above 100 cfs, which are fair. Recording rain gage at station since July 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.5	4.7	4.3	4.5	3.8	8.0	168	19	5.5	3.6	2.3
2	1.9	5.8	4.2	4.1	4.2	5.0	9.0	152	24	3.8	3.4	2.0
3	1.7	5.8	4.6	3.9	4.2	10	7.8	208	12	7.0	3.8	2.0
4	1.7	4.5	4.6	3.8	5.0	8.0	7.2	166	17	8.5	3.2	2.0
5	1.7	3.8	4.5	3.8	4.6	7.0	7.0	157	16	4.2	1.1	2.2
6	1.6	3.5	4.4	3.8	4.2	6.3	6.6	75	8.5	3.4	6.7	2.0
7	2.4	8.2	4.7	3.8	4.2	5.8	6.4	146	9.3	3.6	8.0	1.6
8	2.8	6.1	5.0	3.6	4.2	5.5	6.2	67	8.0	4.0	7.0	2.0
9	2.0	5.0	5.0	3.6	4.2	5.5	6.0	46	23	2.8	6.4	2.8
10	10	4.5	7.0	3.6	4.0	5.0	6.0	37	18	4.9	5.8	2.3
11	18	4.5	30	3.5	4.0	5.0	6.2	33	12	11	4.9	1.8
12	9.2	4.3	23	3.6	4.0	5.0	7.0	28	8.9	4.0	4.0	1.6
13	6.4	4.3	12	3.6	4.0	4.6	10	26	7.0	3.0	3.8	1.4
14	5.0	4.1	10	7.0	4.2	4.3	11	27	5.8	6.4	3.4	2.2
15	4.5	3.8	9.6	7.5	4.5	4.3	11	29	8.9	4.4	3.2	1.8
16	4.0	3.7	35	6.0	4.8	4.4	16	23	19	38	2.6	1.6
17	3.8	1.7	16	4.5	4.6	9.0	24	14	7.3	27	2.5	2.0
18	3.5	3.8	12	4.5	4.6	16	33	15	5.2	10	3.8	1.7
19	3.3	6.7	9.0	6.0	4.8	11	66	12	4.4	23	4.9	2.0
20	3.3	13	7.0	7.4	4.2	8.6	51	11	4.4	14	3.0	2.0
21	3.3	7.6	6.2	6.5	4.2	7.4	35	9.8	4.2	52	2.3	1.6
22	3.3	6.4	5.4	5.6	4.2	7.0	34	8.5	3.8	23	2.2	1.3
23	3.0	5.0	4.5	5.4	4.0	15	34	7.3	3.2	11	2.3	1.2
24	3.0	3.5	7.0	5.6	3.8	8.5	37	6.4	3.6	10	3.8	1.3
25	6.7	3.7	10	8.0	3.8	6.6	32	5.8	4.4	9.3	12	1.4
26	8.5	4.1	8.0	6.4	3.8	6.2	29	5.2	10	14	8.9	1.6
27	5.8	4.5	6.5	5.5	3.8	6.0	28	4.6	6.7	9.8	7.3	2.5
28	4.5	4.5	7.5	5.2	3.8	5.8	33	4.4	6.9	8.9	11	2.0
29	4.0	4.3	5.8	5.0	3.8	6.0	58	3.4	4.0	6.4	5.2	1.7
30	3.8	4.6	5.0	4.7	-----	7.0	119	3.4	3.8	4.6	3.4	4.0
31	3.5	-----	4.5	4.5	-----	6.4	-----	4.4	-----	3.8	2.8	-----
TOTAL	138.0	150.8	282.7	154.3	122.0	216.0	744.4	1507.6	288.3	341.3	219.0	57.9
MEAN	4.45	5.03	9.12	4.98	4.21	6.97	24.8	48.6	9.54	11.0	7.06	1.93
MAX	18	13	35	8.0	5.0	16	119	208	24	52	38	4.0
MIN	1.6	3.5	4.2	3.5	3.8	3.8	6.0	3.4	3.2	2.8	2.2	1.2
CFSM	1.06	1.19	2.17	1.18	1.00	1.66	5.89	11.5	2.27	2.61	1.68	.66
IN.	1.22	1.33	2.50	1.36	1.08	1.91	6.58	13.32	2.53	3.02	1.94	.51

CAL YR 1971 TOTAL 3,678.18 MEAN 10.1 MAX 98 MIN .96 CFSM 2.40 IN 32.50
WTR YR 1972 TOTAL 4,220.30 MEAN 11.5 MAX 208 MIN 1.2 CFSM 2.73 IN 37.29

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-4	2215	3.49	480				
5-7	0315	3.33	220				
7-21	1415	3.26	156				

ST. LAWRENCE RIVER BASIN

04292500 Lamelle River at East Georgia, Vt.

LOCATION.--Lat 44°40'45", long 73°04'23", Franklin County, on right bank at East Georgia, 0.5 mile upstream from railroad bridge and 1 mile downstream from Beaver Meadow Brook.

DRAINAGE AREA.--686 sq mi.

PERIOD OF RECORD.--August 1929 to current year. Prior to October 1937, published as "near Milton."

GAGE.--Water-stage recorder. Altitude of gage is 285 ft (from topographic map). Prior to Dec. 1, 1937, at site 3.5 miles downstream at different datum.

AVERAGE DISCHARGE.--43 years, 1,189 cfs (23.54 inches per year), adjusted to present drainage area.

EXTREMES.--Current year: Maximum discharge, about 15,500 cfs May 5; minimum daily, 240 cfs Sept. 13.

Period of record: Maximum discharge, 23,200 cfs Mar. 19, 1936 (gage height, 12.52 ft, site and datum then in use), by computation of peak flow over dam; maximum gage height, 18.81 ft Apr. 3, 1959 (low jam); minimum daily discharge, 74 cfs Sept. 26, 1964.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Low flow regulated by powerplants above station. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS.--WSP 894: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382	363	640	540	490	290	1,900	6,900	670	720	687	350
2	305	362	680	560	480	400	2,000	8,560	1,390	800	604	320
3	353	355	580	600	400	820	1,950	10,600	1,450	760	1,220	290
4	340	435	600	620	420	860	1,900	11,500	1,030	720	2,440	270
5	306	460	740	640	450	880	1,750	14,000	1,600	680	1,700	320
6	308	461	780	680	370	900	1,600	10,300	1,580	590	1,070	340
7	414	579	740	520	360	700	1,400	7,380	1,200	510	840	280
8	371	923	720	580	410	700	1,350	7,120	1,330	440	832	250
9	481	791	780	650	370	720	1,300	5,010	1,630	430	780	290
10	395	677	880	680	340	680	1,350	3,960	2,540	430	1,020	320
11	1,330	647	1,500	690	330	560	1,450	3,320	2,250	1,200	777	340
12	1,450	588	2,300	680	330	520	1,500	2,930	1,510	1,000	659	300
13	846	568	1,700	660	360	500	1,900	2,560	1,110	800	575	240
14	705	505	1,350	640	380	560	2,500	2,660	899	650	515	250
15	570	523	1,100	700	520	510	2,300	3,090	870	620	508	360
16	454	523	1,300	820	660	460	3,700	3,040	6,200	620	492	380
17	374	581	1,700	800	600	700	4,160	2,560	5,130	1,700	460	400
18	414	547	1,450	700	500	1,500	5,050	2,230	2,000	1,500	428	440
19	358	544	1,100	650	350	1,800	6,380	1,880	1,150	1,360	403	380
20	352	720	820	760	380	1,450	8,250	1,650	1,000	1,830	462	360
21	400	800	550	740	340	1,400	6,040	1,420	900	2,710	421	360
22	440	740	660	680	320	1,400	4,900	1,290	800	5,330	400	390
23	408	500	740	680	300	1,700	4,980	1,090	700	2,620	410	400
24	369	400	680	740	290	2,300	5,260	889	720	1,950	450	360
25	302	370	800	800	280	2,000	4,610	747	850	1,870	410	350
26	569	380	1,100	880	270	1,600	3,850	662	1,200	2,930	360	360
27	643	450	1,050	860	270	1,500	3,540	548	1,300	3,150	350	420
28	607	520	1,000	800	270	1,250	2,980	543	1,000	2,180	400	400
29	565	360	900	700	280	1,200	3,600	501	850	1,510	430	370
30	431	520	800	520	-----	1,450	5,140	529	760	1,160	400	360
31	365	-----	700	490	-----	1,700	-----	494	-----	884	380	-----
TOTAL	15,607	16,082	30,360	20,990	11,120	32,870	98,590	119,963	45,619	43,654	20,883	10,250
MEAN	503	516	979	677	383	1,060	3,284	3,870	1,521	1,408	674	342
MAX	1,450	923	2,300	880	660	2,300	8,250	14,000	6,200	5,330	2,440	440
MIN	302	300	550	490	270	290	1,300	494	670	430	350	240
CFS/IN	.73	.78	1.43	.99	.56	1.55	4.79	5.64	2.22	2.05	.98	.50
IN.	.85	.87	1.65	1.14	.60	1.78	5.35	6.51	2.47	2.37	1.13	.56

CAL YR 1971 TOTAL 437,574 MEAN 1,199 MAX 11,100 MIN 194 CFSM 1.75 IN 23.73
WTR YR 1972 TOTAL 465,988 MEAN 1,273 MAX 14,000 MIN 240 CFSM 1.86 IN 25.27

PEAK DISCHARGE (BASE, 10,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	-	-	115,500				

† About.

NOTE.--No gage-height record May 4, 5, June 18 to July 18, Aug. 22 to Sept. 30.

ST. LAWRENCE RIVER BASIN

241

04292700 Stone Bridge Brook near Georgia Plains, Vt.

LOCATION.--Lat 44°42'13", long 73°10'54", Franklin County, on left bank 20 ft upstream from culvert on gravel road and 1.5 miles southwest of Georgia Plains.

DRAINAGE AREA.--8.45 sq mi.

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 150 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 6.99 cfs (11.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 212 cfs July 27 (gage height, 5.24 ft), from rating curve extended above 75 cfs; maximum gage height, 5.91 ft Mar. 17 (ice jam); minimum discharge, 1.2 cfs Oct. 6.

Period of record: Maximum discharge, 264 cfs May 20, 1969 (gage height, 5.54 ft), from rating curve extended above 75 cfs; maximum gage height, 6.01 ft Jan. 26, 1964 (backwater from ice); minimum discharge, 0.22 cfs Aug. 5, 1965.

REMARKS.--Records good except those for winter period, which are fair. Recording rain gage at station since July 1964 (no winter records).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.6	4.2	4.5	2.4	3.7	30	11	14	3.4	5.0	2.5
2	1.5	2.6	3.4	5.0	3.1	4.0	29	19	14	3.3	4.2	2.4
3	1.4	3.0	3.5	4.0	3.3	17	27	44	12	16	4.0	2.0
4	1.4	3.3	3.6	4.0	3.2	14	25	44	4.0	41	4.0	2.0
5	1.4	3.3	4.3	4.7	3.0	11	23	44	5.5	12	5.5	2.0
6	1.4	3.3	4.4	4.4	2.9	9.0	21	40	3.4	5.5	4.4	1.9
7	1.4	4.8	4.2	4.5	2.4	9.0	20	35	3.2	3.5	4.5	1.4
8	2.0	9.0	4.5	4.4	2.7	9.0	21	20	3.4	2.8	4.4	2.2
9	2.0	4.4	7.0	5.0	2.6	9.5	16	14	17	2.4	4.4	5.3
10	2.7	5.1	15	5.5	2.6	9.2	24	19	21	3.0	3.5	4.2
11	1.0	4.4	30	4.0	2.5	7.2	30	9.7	18	4.4	3.3	3.1
12	3.3	4.0	20	4.5	2.5	4.4	28	4.5	9.9	4.4	2.6	2.5
13	4.4	3.4	13	7.2	2.7	5.4	44	7.5	5.3	4.2	3.7	2.1
14	3.1	3.6	10	4.4	3.5	5.4	72	6.9	3.4	11	2.4	2.1
15	2.4	3.4	3.5	4.0	5.0	5.0	52	7.7	4.2	5.4	2.4	2.1
16	2.4	3.2	17	4.5	4.0	5.4	74	9.5	14	14	2.2	1.9
17	2.4	3.1	14	3.3	5.0	20	40	9.5	9.3	13	2.0	2.0
18	2.3	3.0	10	3.4	4.5	30	53	12	4.4	7.5	2.4	2.1
19	2.2	3.1	7.5	5.0	4.1	24	43	10	3.1	11	2.4	2.1
20	2.1	3.5	6.2	5.5	3.2	21	54	7.3	2.4	15	2.5	2.1
21	2.0	3.5	4.5	4.5	3.4	14	32	5.9	2.2	25	2.3	2.1
22	2.0	3.1	4.0	3.5	3.4	20	24	4.4	2.4	24	2.1	1.9
23	2.1	2.0	5.4	5.0	3.2	40	34	4.0	2.4	13	2.3	1.9
24	2.1	2.4	4.7	4.0	3.4	30	32	3.3	4.4	14	3.2	2.0
25	2.4	2.4	5.4	5.0	3.4	24	23	2.4	4.4	14	3.9	2.1
26	1.4	3.1	5.2	4.0	3.4	20	14	2.3	15	21	4.5	1.9
27	3.4	3.4	4.2	3.3	3.0	17	13	2.0	4.4	122	4.4	2.0
28	3.1	3.5	4.0	3.0	3.0	15	11	1.9	13	34	7.5	1.8
29	2.7	3.7	5.2	3.0	3.0	14	11	1.8	4.7	15	5.3	1.7
30	2.7	4.0	4.3	2.7	-----	24	11	1.4	2.4	9.7	3.7	2.0
31	2.7	-----	4.4	2.4	-----	24	-----	7.3	-----	6.2	3.3	-----
TOTAL	45.5	113.5	253.9	146.0	100.9	479.4	999	433.1	241.2	444.3	114.3	67.8
MEAN	2.74	3.74	4.19	4.74	3.48	15.5	33.3	14.0	4.04	15.2	3.82	2.26
MAX	10	9.0	30	4.4	4.0	40	74	64	21	122	7.5	5.3
MIN	1.4	2.5	3.5	2.7	2.4	3.7	11	1.6	2.2	2.4	2.0	1.7
CFSM	.33	.45	.97	.54	.41	1.03	3.94	1.66	.95	1.47	.45	.27
IN.	.74	.50	1.12	.45	.44	2.11	4.40	1.91	1.06	2.15	.52	.30

CAL YR 1971 TOTAL 3,492.35 MEAN 9.58 MAX 105 MIN .70 CFSM 1.13 IN 15.40
WTR YR 1972 TOTAL 3,524.00 MEAN 9.44 MAX 122 MIN 1.4 CFSM 1.14 IN 15.53

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-14	0645	4.34	92				
5-5	1130	4.20	78				
7-27	0500	5.24	212				

ST. LAWRENCE RIVER BASIN

04293000 Missisquoi River near North Troy, Vt.

LOCATION.--Lat 44°58'22", long 72°23'15", Orleans County, on right bank 200 ft upstream from Big Falls, 1.5 miles downstream from Jay Branch, and 2.2 miles upstream from North Troy.

DRAINAGE AREA.--131 sq mi.

PERIOD OF RECORD.--August 1931 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (from topographic map).

AVERAGE DISCHARGE.--41 years, 263 cfs (27.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,520 cfs May 5 (gage height, 9.63 ft); minimum, 30 cfs Aug. 22, 23; minimum daily, 35 cfs Sept. 23-25. Period of record: Maximum discharge, 7,980 cfs May 3, 1940 (gage height, 12.87 ft), from rating curve extended above 3,600 cfs on basis of computation of flow over dam at gage height 11.70 ft; minimum, 9.4 cfs Aug. 28, 1949; minimum daily, 11 cfs Aug. 28, 1949, Aug. 30, 1953.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Occasional regulation at low flow caused by small powerplant above station; greater regulation prior to 1967.

REVISIONS (WATER YEARS).--WSP 924: 1940. WSP 1114. 1933(M), 1936-39.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	71	105	118	84	73	318	2,310	322	110	94	68
2	60	71	90	126	82	92	402	2,440	458	110	86	64
3	57	85	105	123	81	150	373	3,170	373	500	410	60
4	55	85	98	115	61	180	295	3,010	248	400	831	59
5	55	83	90	108	80	140	272	3,550	380	200	290	60
6	55	79	100	105	78	120	241	1,480	199	130	166	56
7	57	133	115	108	77	110	202	2,230	184	105	144	51
8	66	179	115	105	76	105	176	1,410	179	92	164	50
9	62	114	120	100	74	105	183	1,000	576	84	154	65
10	82	97	250	122	72	100	214	808	549	80	127	65
11	397	98	700	120	70	96	269	702	399	170	150	56
12	208	93	811	125	68	93	317	651	235	150	108	49
13	139	90	411	125	68	90	435	580	166	120	101	46
14	107	75	225	190	74	88	451	778	130	110	90	52
15	93	66	175	190	82	88	410	908	114	150	82	52
16	84	69	700	120	100	90	558	691	379	800	83	46
17	78	72	646	100	90	150	802	600	187	500	58	45
18	75	83	250	100	84	280	1,160	518	125	270	72	47
19	71	158	135	130	80	250	1,520	527	102	215	110	43
20	69	382	150	170	76	220	1,780	382	93	299	82	42
21	68	217	165	130	72	200	1,210	311	90	1,080	83	40
22	67	157	120	105	74	190	1,040	254	94	1,730	52	37
23	65	110	100	115	70	250	1,130	201	88	391	56	35
24	63	71	145	125	70	280	1,280	166	82	275	405	35
25	109	91	250	155	70	210	1,040	141	80	208	158	35
26	148	86	230	160	71	180	733	120	140	268	225	36
27	129	102	170	115	70	167	646	120	170	298	124	41
28	99	104	150	100	71	157	602	100	120	257	239	42
29	85	101	140	94	72	170	1,130	95	105	189	143	39
30	78	99	130	90	-----	251	1,660	87	100	137	101	40
31	74	-----	127	86	-----	244	-----	95	-----	108	72	-----
TOTAL	2,922	3,323	7,128	3,775	2,217	4,919	20,849	29,435	6,467	9,536	5,060	1,456
MEAN	94.3	111	230	122	76.4	159	695	950	216	308	163	48.5
MAX	397	382	811	190	100	280	1,780	3,550	576	1,730	831	68
MIN	55	68	90	86	68	73	176	87	80	80	52	35
CFSM	.72	.85	1.76	.93	.58	1.21	5.31	7.25	1.65	2.35	1.24	.37
IN.	.83	.94	2.02	1.87	.63	1.40	5.92	8.36	1.84	2.71	1.44	.41

CAL YR 1971 TOTAL 101,960 MEAN 279 MAX 3,080 MIN 34 CFSM 2.13 IN 28.94
WTR YR 1972 TOTAL 97,087 MEAN 265 MAX 3,550 MIN 35 CFSM 2.02 IN 27.57

PEAK DISCHARGE (BASE, 3,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0745	9.63	4,520				
7-21	2145	8.58	3,590				

NOTE.--No gage-height record, June 20 to July 19.

ST. LAWRENCE RIVER BASIN

243

04293500 Missisquoi River near Richford, Vt.

LOCATION.--Lat 44°57'30", long 72°41'55", Franklin County, on left bank 1.7 miles upstream from Trout River, 3 miles south of Richford, and 3.8 miles downstream from North Branch.

DRAINAGE AREA.--479 sq mi.

PERIOD OF RECORD.--July 1911 to September 1923, October 1928 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Altitude of gage is 410 ft (from topographic map). Prior to Aug. 1, 1915, nonrecording gage at site 0.2 mile downstream at datum 4.35 ft lower. Aug. 1, 1915, to Sept. 30, 1923, water-stage recorder at present site and datum. Oct. 1, 1928, to Sept. 30, 1929, nonrecording gage at former site at datum 4.6 ft lower.

AVERAGE DISCHARGE.--56 years, 902 cfs (25.57 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,000 cfs May 5 (gage height, 12.23 ft); minimum, 106 cfs Sept. 24, 25, 26.

Period of record: Maximum discharge, 17,200 cfs May 4, 1940 (gage height, 15.15 ft), from rating curve extended above 9,300 cfs on basis of computation of peak flow over dam at gage height 14.70 ft, slope-area measurement at gage height 12.90 ft, and study of discharge per foot of width at measuring section; maximum gage height, 18.92 ft Mar. 15, 1946 (ice jam); minimum discharge observed, 8 cfs July 14, 1911. Maximum discharge since at least 1830, 45,000 cfs during flood of November 1927 (gage height, 23.1 ft, from floodmarks), from rating curve extended above 9,300 cfs as explained above.

REMARKS.--Records good except those for winter period, which are fair. Diurnal fluctuation at low flow prior to 1934. Records of suspended-sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	249	380	460	280	280	1,200	6,090	651	367	472	266
2	212	240	330	480	270	379	1,400	7,150	1,800	348	399	245
3	195	239	360	490	250	556	1,400	9,030	2,610	618	813	221
4	182	248	370	470	250	660	1,100	9,290	1,560	1,630	1,690	211
5	176	253	350	460	250	540	1,000	10,600	1,700	961	1,490	213
6	170	252	330	450	245	450	900	8,100	1,010	517	857	194
7	181	329	390	440	240	410	800	6,250	750	384	723	177
8	182	505	420	430	230	390	720	5,250	601	373	1,210	173
9	183	438	450	400	220	390	670	3,850	1,150	277	937	213
10	210	352	1,000	500	210	370	740	2,740	2,160	268	701	206
11	868	333	2,300	490	205	360	900	2,230	2,150	506	709	190
12	908	318	2,700	520	200	350	1,200	2,000	1,440	580	643	172
13	586	312	1,700	540	200	340	1,500	1,790	964	400	567	160
14	485	265	900	700	225	330	1,600	1,940	652	367	478	160
15	429	230	650	600	240	320	1,500	2,210	511	366	401	165
16	386	240	2,200	540	400	320	2,300	2,000	837	2,550	346	157
17	344	240	2,400	460	360	600	3,200	1,710	769	2,740	316	147
18	316	267	1,200	400	320	950	3,940	1,480	471	1,620	300	138
19	287	421	550	570	300	1,000	5,620	1,470	366	973	403	140
20	261	1,040	640	620	290	900	6,530	1,220	316	998	355	140
21	246	900	660	510	280	800	6,070	974	305	2,090	289	132
22	231	622	520	460	260	740	5,000	798	314	4,150	266	124
23	220	470	400	420	270	1,000	4,980	622	297	2,640	353	115
24	211	300	600	460	270	950	5,050	512	268	1,290	633	109
25	260	320	900	600	270	860	4,790	415	260	917	629	108
26	429	340	1,000	580	260	760	3,640	357	330	1,700	1,070	110
27	457	390	800	470	260	660	2,870	319	587	1,900	588	140
28	383	380	650	340	265	610	2,490	294	471	1,960	584	136
29	327	370	560	340	270	660	3,190	262	368	1,300	553	123
30	290	370	500	320	-----	800	4,490	238	336	858	368	125
31	268	-----	470	300	-----	900	-----	363	-----	608	315	-----
TOTAL	10,130	11,223	25,690	14,850	7,650	10,560	80,790	91,634	25,484	35,814	19,478	4,910
MEAN	327	374	861	479	264	599	2,693	2,956	849	1,155	628	164
MAX	908	1,040	2,700	700	400	1,000	6,530	10,600	2,160	4,150	1,690	266
MIN	170	230	330	300	200	200	670	238	260	268	266	108
CFSM	.68	.76	1.80	1.00	.55	1.25	5.62	6.17	1.77	2.41	1.31	.34
IN.	.79	.87	2.07	1.15	.59	1.44	6.27	7.12	1.98	2.78	1.51	.38

CAL YR 1971 TOTAL 328,002 MEAN 899 MAX 9,190 MIN 85 CFSM 1.88 IN 25.47
WTR YR 1972 TOTAL 347,212 MEAN 949 MAX 10,600 MIN 108 CFSM 1.98 IN 26.97

PEAK DISCHARGE (BASE, 7,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-5	0330	12.23	11,000				

ST. LAWRENCE RIVER BASIN

04294500 Lake Champlain at Burlington, Vt.

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, 50 ft south of Gulf Oil Co. dock at Burlington, 0.1 mile north of Burlington Water Department pumping station, and 0.5 mile north of railroad station.

PERIOD OF RECORD.--May 1907 to current year.

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft above mean sea level. Prior to July 20, 1937, nonrecording gage at site 0.7 mile south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mile south, both at present datum.

EXTREMES.--Current year: Maximum gage height, 8.57 ft May 9, 10; minimum, 1.72 ft Nov. 19, Dec. 6, affected by seiche.
Period of record: Maximum gage height observed, 8.65 ft Mar. 27, 28, 1936; minimum observed, -0.25 ft Dec. 4, 1908.

REVISIONS (WATER YEARS).--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.10	2.27	1.89	2.71	2.58	2.29	4.05	6.64	6.50	4.99	4.89	3.91
2	3.06	2.26	1.85	2.71	2.56	2.30	4.21	6.81	6.50	4.99	4.87	3.75
3	3.01	2.25	1.83	2.71	2.54	2.37	4.32	7.07	6.45	4.98	4.87	3.71
4	2.96	2.22	1.83	2.71	2.60	2.42	4.40	7.46	6.35	4.96	4.81	3.66
5	2.90	2.19	1.81	2.70	2.57	2.44	4.45	7.88	6.25	4.94	4.80	3.63
6	2.87	2.05	1.76	2.70	2.54	2.47	4.47	8.21	6.20	4.90	4.75	3.56
7	2.85	2.09	1.83	2.69	2.52	2.49	4.48	8.38	6.10	4.83	4.68	3.49
8	2.82	2.11	1.83	2.68	2.49	2.40	4.47	8.52	6.05	4.75	4.70	3.45
9	2.80	2.09	1.82	2.67	2.48	2.52	4.44	8.57	5.90	4.68	4.70	3.43
10	2.78	2.03	1.87	2.65	2.46	2.54	4.43	8.57	5.80	4.60	4.65	3.38
11	2.78	2.04	1.95	2.63	2.44	2.55	4.44	8.50	5.85	4.57	4.62	3.31
12	2.77	2.03	2.19	2.61	2.39	2.55	4.46	8.45	5.85	4.55	4.56	3.27
13	2.77	2.01	2.37	2.59	2.38	2.55	4.53	8.38	5.78	4.54	4.50	3.20
14	2.76	1.97	2.45	2.57	2.37	2.57	4.69	8.28	5.70	4.52	4.47	3.17
15	2.75	1.94	2.47	2.58	2.34	2.55	4.83	8.22	5.65	4.46	4.43	3.11
16	2.73	1.92	2.53	2.60	2.35	2.57	4.98	8.19	5.50	4.46	4.38	3.06
17	2.71	1.89	2.68	2.61	2.35	2.56	5.12	8.17	5.55	4.49	4.28	2.97
18	2.69	1.85	2.79	2.59	2.34	2.64	5.32	8.12	5.56	4.50	4.21	2.97
19	2.68	1.78	2.80	2.57	2.39	2.82	5.51	8.05	5.44	4.49	4.19	2.99
20	2.61	1.82	2.79	2.56	2.41	2.96	5.79	7.93	5.36	4.50	4.17	2.97
21	2.60	1.85	2.82	2.55	2.38	3.06	6.03	7.84	5.27	4.49	4.10	2.86
22	2.57	1.89	2.83	2.55	2.37	3.13	6.19	7.75	5.24	4.53	4.03	2.82
23	2.56	1.85	2.79	2.56	2.36	3.26	6.31	7.62	5.17	4.62	4.00	2.78
24	2.52	1.82	2.73	2.57	2.36	3.47	6.41	7.51	5.15	4.74	4.02	2.71
25	2.47	1.84	2.77	2.58	2.35	3.62	6.51	7.41	5.16	4.84	4.00	2.66
26	2.49	1.85	2.74	2.60	2.34	3.69	6.54	7.25	5.15	4.93	3.98	2.64
27	2.47	1.81	2.74	2.63	2.33	3.75	6.56	7.15	5.12	5.00	3.94	2.63
28	2.42	1.80	2.73	2.65	2.30	3.77	6.56	7.00	5.09	5.03	3.94	2.58
29	2.44	1.82	2.74	2.65	2.30	3.79	6.56	6.85	5.05	5.04	3.93	2.44
30	2.42	1.92	2.77	2.63	-----	3.84	6.57	6.75	5.01	5.02	3.91	2.47
31	2.30	-----	2.79	2.60	-----	3.93	-----	6.60	-----	4.97	3.85	-----
MEAN	2.70	1.98	2.38	2.63	2.42	2.90	5.25	7.73	5.66	4.74	4.36	3.12
MAX	3.10	2.27	2.83	2.71	2.60	3.93	6.57	8.57	6.50	5.04	4.89	3.81
MIN	2.30	1.78	1.76	2.55	2.30	2.29	4.05	6.60	5.01	4.46	3.85	2.44

CAL YR 1971 MEAN 3.54 MAX 8.37 MIN 1.76
WTR YR 1972 MEAN 3.83 MAX 8.57 MIN 1.76

NOTE.--No gage-height record Oct. 1-18, Jan. 5 to Feb. 1, May 27 to June 17.

ST. LAWRENCE RIVER BASIN

245

04295500 Lake Memphremagog at Newport, Vt.

LOCATION.--Lat 44°56'15", long 72°12'21", Orleans County, on west side of bridge on U.S. Highway 5 at Newport.

PERIOD OF RECORD.--May 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft above mean sea level. Prior to July 21, 1934, nonrecording gage on highway bridge 0.1 mile southeast at same datum. July 21, 1934, to Aug. 22, 1961, nonrecording gage on east side, and Aug. 23, 1961, to Oct. 18, 1966, on west side of bridge at present site and datum.

EXTREMES.--Current year: Maximum gage height, about 11.67 ft about May 7 or 8; minimum, 6.53 ft Feb. 18 (affected by seiche).
Period of record: Maximum gage height observed, 12.92 ft Apr. 20, 1933; minimum recorded, 6.48 ft Nov. 2, 1968 (affected by seiche), but may have been lower during period of use of nonrecording gage.

REMARKS.--Elevation of lake regulated by powerplant and gates at Magog, Quebec.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.34	8.50	7.77	8.18	7.32	6.65	7.29	9.95	9.95	9.54	9.87	9.00
2	9.30	8.63	7.70	8.14	7.27	6.66	7.34	10.15	10.00	9.52	9.83	8.97
3	9.29	8.62	7.67	8.20	7.27	6.75	7.39	10.42	10.10	9.56	9.76	8.98
4	9.11	8.88	7.66	8.16	7.18	6.76	7.43	10.91	10.05	9.58	9.80	8.98
5	9.11	8.35	7.61	8.13	7.14	6.81	7.47	11.35	10.05	9.51	9.74	8.96
6	9.10	8.23	7.58	8.12	7.10	6.85	7.50	11.55	10.10	9.44	9.73	8.93
7	9.05	8.30	7.54	8.12	7.06	6.86	7.52	11.65	10.10	9.38	9.69	8.88
8	9.00	8.29	7.52	8.12	6.99	6.88	7.51	11.65	10.11	9.33	9.71	8.86
9	8.92	8.24	7.50	8.07	6.94	6.88	7.49	11.60	10.10	9.29	9.68	8.90
10	8.93	8.16	7.48	8.04	6.88	6.87	7.47	11.45	10.11	9.25	9.65	8.89
11	8.97	8.16	7.60	7.98	6.82	6.86	7.47	11.55	10.20	9.28	9.63	8.81
12	8.98	8.12	7.62	7.94	6.76	6.84	7.49	11.55	10.20	9.25	9.56	8.81
13	8.94	8.11	7.72	7.98	6.71	6.80	7.57	10.95	10.10	9.20	9.57	8.79
14	8.92	8.05	7.75	7.87	6.67	6.77	7.68	10.95	10.05	9.19	9.52	8.75
15	8.93	8.02	7.78	7.85	6.63	6.75	7.74	10.60	10.05	9.17	9.47	8.68
16	8.92	7.99	7.89	7.83	6.60	6.72	7.81	10.40	10.00	9.34	9.41	8.66
17	8.89	7.93	8.04	7.80	6.59	6.76	7.90	10.75	9.90	9.46	9.34	8.63
18	8.84	7.89	8.11	7.76	6.58	6.86	8.07	10.15	9.95	9.52	9.29	8.63
19	8.84	7.83	8.12	7.74	6.50	6.93	8.36	10.05	9.90	9.59	9.33	8.67
20	8.77	7.88	8.13	7.72	6.45	6.99	8.70	10.10	9.87	9.66	9.34	8.60
21	8.77	7.88	8.14	7.70	6.65	7.06	8.97	10.10	9.84	9.79	9.29	8.52
22	8.75	7.92	8.13	7.65	6.66	7.12	9.17	10.05	9.82	10.01	9.24	8.54
23	8.73	7.85	8.14	7.64	6.65	7.18	9.33	10.05	9.75	10.12	9.21	8.49
24	8.66	7.76	8.13	7.60	6.65	7.22	9.50	10.05	9.72	10.20	9.22	8.42
25	8.64	7.80	8.15	7.57	6.63	7.25	9.63	10.00	9.72	10.20	9.18	8.43
26	8.65	7.84	8.16	7.55	6.63	7.26	9.68	10.00	9.74	10.36	9.19	8.41
27	8.65	7.75	8.16	7.52	6.64	7.27	9.70	10.00	9.73	10.19	9.12	8.43
28	8.62	7.74	8.18	7.49	6.64	7.26	9.70	10.00	9.69	10.06	9.11	8.37
29	8.62	7.71	8.18	7.44	6.65	7.25	9.69	9.95	9.65	9.98	9.11	8.34
30	8.60	7.83	8.19	7.40	-----	7.26	9.78	9.90	9.60	9.96	9.07	8.31
31	8.44	-----	8.23	7.37	-----	7.28	-----	9.90	-----	9.92	9.03	-----
MEAN	8.88	8.05	7.89	7.83	6.81	6.96	8.28	10.53	9.94	9.64	9.44	8.68
MAX	9.34	8.50	8.23	8.20	7.32	7.28	9.78	11.65	10.20	10.36	9.87	9.00
MIN	8.44	7.71	7.48	7.37	6.58	6.65	7.29	9.90	9.60	9.17	9.03	8.24

CAL YR 1971 MEAN 8.67 MAX 10.80 MIN 6.91
WTR YR 1972 MEAN 8.59 MAX 11.65 MIN 6.58

NOTE.--No gage-height record May 5 to June 19.

ST. LAWRENCE RIVER BASIN

04296000 Black River at Coventry, Vt.

LOCATION. --Lat 44°32'08", long 72°16'14", Orleans County, on right bank 15 ft downstream from highway bridge, 800 ft upstream from Stony Brook, and 0.4 mile northwest of Coventry.

DRAINAGE AREA. --122 sq mi.

PERIOD OF RECORD. --October 1951 to current year.

GAGE. --Water-stage recorder. Altitude of gage is 725 ft (from topographic map).

AVERAGE DISCHARGE. --21 years, 189 cfs (21.04 inches per year).

EXTREMES. --Current year: Maximum discharge, 2,950 cfs May 5 (gage height, 7.33 ft); minimum daily, 37 cfs Sept. 29.
Period of record: Maximum discharge, 3,110 cfs Apr. 18, 1970 (gage height, 7.28 ft); maximum gage height, 7.33 ft May 5, 1972; minimum daily discharge, 11 cfs Aug. 29 to Sept. 1, 1953.

REMARKS. --Records excellent except those for winter period and period of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow by mill above station; greater regulation prior to 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	49	72	88	72	58	253	1,340	127	107	87	67
2	44	50	62	85	78	88	318	1,650	206	118	82	61
3	43	55	72	86	68	90	345	2,110	196	100	220	63
4	46	60	68	80	67	110	380	2,330	183	144	366	63
5	46	57	62	78	67	120	295	2,650	378	117	257	61
6	44	54	70	78	86	115	278	1,870	285	92	153	57
7	44	70	79	80	65	110	240	1,420	218	79	114	53
8	44	111	80	77	64	105	235	1,190	189	78	121	56
9	44	100	82	77	62	100	222	948	283	73	119	55
10	50	75	150	80	64	97	284	765	345	72	127	53
11	142	67	310	77	62	94	237	648	298	82	127	52
12	190	47	340	79	62	91	259	575	210	108	108	48
13	124	62	280	80	61	88	326	490	160	89	93	47
14	88	52	150	100	60	84	347	426	131	87	88	46
15	77	47	130	140	66	82	358	415	121	100	82	46
16	67	48	305	120	76	84	392	400	176	127	77	46
17	57	50	360	100	80	135	541	384	273	167	77	45
18	51	58	190	90	72	240	780	340	342	194	73	43
19	47	100	105	80	68	260	940	301	298	167	84	42
20	45	200	125	110	64	240	1,100	253	163	206	91	41
21	46	170	130	115	62	216	1,190	214	138	361	77	43
22	46	130	95	100	61	204	1,160	192	130	643	68	41
23	45	90	82	85	62	244	1,110	167	118	429	73	40
24	45	52	110	85	60	262	1,070	148	108	326	141	41
25	44	62	145	88	60	237	982	131	108	212	87	39
26	68	60	170	130	60	218	840	119	130	178	85	38
27	85	70	130	120	60	206	790	112	149	190	100	40
28	74	72	110	95	59	196	720	107	138	163	88	38
29	62	70	100	80	59	198	860	103	108	138	87	37
30	55	68	94	77	-----	244	1,020	96	98	114	91	40
31	51	-----	90	74	-----	231	-----	93	-----	97	76	-----
TOTAL	1,968	2,276	4,378	2,834	1,879	4,839	17,732	21,980	5,819	5,166	3,517	1,442
MEAN	63.5	75.9	141	91.4	64.8	156	591	709	194	167	113	48.1
MAX	190	200	360	140	80	262	1,190	2,650	378	643	366	67
MIN	43	47	62	74	59	58	284	93	98	72	68	37
CFSM	.52	.62	1.16	.75	.53	1.28	4.84	5.81	1.59	1.37	.93	.39
IN.	.60	.69	1.33	.86	.57	1.48	5.41	6.70	1.77	1.58	1.07	.44

CAL YR 1971 TOTAL 68,547 MEAN 186 MAX 1,710 MIN 23 CFSM 1.54 IN 20.90
WTR YR 1972 TOTAL 73,839 MEAN 202 MAX 2,650 MIN 37 CFSM 1.66 IN 22.51

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
9-5	0430	7.33	2,950				

NOTE. --No gage-height record Nov. 13 to Dec. 15.

ST. LAWRENCE RIVER BASIN

247

04296200 Brownington Branch near Evansville, Vt.

LOCATION.--Lat 44°50'02", long 72°04'00", Orleans County, on right bank 10 ft upstream from culvert on State Highway 5A, 0.5 mile upstream from Moody Brook, and 4 miles northeast of Evansville.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,170 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 3.24 cfs (20.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 144 cfs about May 4 (gage height, 7.36 ft, from peak-stage indicator), from rating curve extended above 89 cfs on basis of computation of flow through culvert at gage height 6.67 ft; minimum, 0.04 cfs Sept. 24-26.
Period of record: Maximum discharge, 158 cfs May 20, 1969 (gage height, 7.68 ft), from rating curve extended above 89 cfs on basis of computation of flow through culvert at gage height 6.67 ft; no flow at times in water years 1966, 1968-71.

REMARKS.--Records good except those for winter period and periods of doubtful or no gage-height record, which are fair. Recording rain gage at station since April 1964 (no winter records).

REVISIONS (WATER YEARS).--WHD Mass., N.H., R.I., Vt., 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.41	1.3	.90	1.0	.73	3.3	30	1.4	.60	.10	.18
2	.10	.68	1.2	1.1	1.0	1.8	4.2	40	2.0	.45	.10	.15
3	.10	.69	1.1	1.1	1.1	2.3	4.3	60	1.2	1.5	5.5	.10
4	.08	.69	1.1	1.0	1.1	3.0	3.6	70	3.5	1.1	7.1	.10
5	.08	.69	1.3	1.1	1.0	2.2	3.6	50	2.0	.76	2.3	.10
6	.11	.62	1.6	.90	.90	1.8	3.0	30	2.5	.55	1.1	.06
7	.28	2.2	1.6	1.1	.85	1.6	2.3	20	1.8	.37	1.0	.06
8	.18	2.0	1.5	1.0	.82	1.6	2.3	15	1.1	.27	.97	.08
9	.13	1.4	2.0	.90	.82	1.4	2.5	12	2.2	.22	1.4	.32
10	.62	1.3	4.0	.96	.80	1.1	2.5	11	3.2	.22	3.4	.15
11	3.8	1.3	9.0	1.0	.80	1.1	2.8	10	1.7	.49	2.6	.10
12	1.8	1.1	7.5	1.1	.80	1.2	3.4	9.0	1.1	.18	1.4	.08
13	1.2	1.0	5.6	2.3	.78	1.2	3.6	8.0	.70	.11	1.1	.08
14	.93	.83	3.7	3.5	.82	1.2	5.5	7.6	.85	.15	.76	.15
15	.77	.83	3.3	2.2	.90	1.2	4.7	7.4	2.0	.12	.49	.12
16	.85	.83	9.3	1.1	.88	1.2	5.5	7.2	1.4	.37	.37	.08
17	.68	.60	5.3	1.3	.86	6.0	8.1	4.6	1.1	1.2	.32	.08
18	.64	.83	2.9	1.6	.86	5.2	13	5.4	.88	.32	.55	.08
19	.34	2.8	1.9	1.6	.84	4.5	25	4.5	.70	.22	.62	.06
20	.34	4.7	2.5	1.4	.82	4.0	20	3.7	1.2	.22	.37	.06
21	.41	2.8	2.2	1.3	.82	3.7	17	3.0	.90	5.7	.27	.06
22	.34	2.0	1.5	1.1	.80	3.5	15	2.3	.75	3.2	.15	.05
23	.34	1.1	1.4	1.2	.80	6.5	17	1.8	.70	1.1	2.1	.05
24	.28	.90	3.0	1.3	.78	5.8	17	1.3	.70	1.6	3.3	.05
25	.55	.80	3.0	2.0	.78	4.0	15	.90	.70	1.0	2.0	.04
26	1.2	1.3	2.3	1.3	.76	7.4	13	.76	1.8	.76	1.9	.04
27	1.2	1.3	2.0	1.3	.76	2.0	11	.70	1.1	.76	1.1	.08
28	.93	1.3	1.7	1.2	.76	2.0	13	.60	.70	.85	1.3	.08
29	.70	1.2	1.5	1.2	.76	2.9	16	.56	.50	.63	.76	.07
30	.55	1.4	1.4	1.1	-----	3.4	20	.54	1.0	.27	.43	.12
31	.41	-----	1.2	1.1	-----	3.2	-----	.80	-----	.18	.27	-----
TOTAL	19.41	39.60	92.9	41.25	26.73	86.73	277.2	420.66	41.20	24.97	45.13	2.83
MEAN	.53	1.32	3.00	1.33	.85	2.80	9.24	13.6	1.37	.81	1.46	.094
MAX	3.8	4.7	9.3	3.5	1.1	6.5	25	70	3.5	5.7	7.1	.32
MIN	.04	.61	1.1	.90	.76	.73	2.3	.54	.50	.11	.10	.04
CFSM	.79	.61	1.40	.82	.60	1.30	4.30	6.33	.64	.38	.68	.04
IN.	.34	.68	1.61	.71	.63	1.50	4.80	7.28	.71	.43	.78	.05

CAL YR 1971 TOTAL 942.31 MEAN 2.58 MAX 21 MIN 0 CFSM 1.20 IN 16.30
WTR YR 1972 TOTAL 1,116.50 MEAN 3.05 MAX 70 MIN .04 CFSM 1.42 IN 10.32

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
95-6	-	7.36	144				

† About.

NOTE.--Doubtful or no gage-height record Apr. 18 to May 24, May 27 to July 5.

ST. LAWRENCE RIVER BASIN

04296500 Clyde River at Newport, Vt.

LOCATION.--Lat 44°56'22", long 72°11'23", Orleans County, on right bank in Newport, just downstream from small right-bank tributary and 1 mile upstream from mouth.

DRAINAGE AREA.--142 sq. mi.

PERIOD OF RECORD.--May 1909 to September 1919, May 1920 to August 1922, October 1922 to September 1924, November 1928 to May 1936, September 1938 to current year. Prior to November 1928, published as "at West Derby."

GAGE.--Water-stage recorder and, since Mar. 6, 1957, records of power generation. Datum of gage is 682.36 ft above mean sea level. May 25, 1909, to Sept. 20, 1915, nonrecording gage, and Sept. 21, 1915, to Sept. 30, 1924, Nov. 16, 1928, to May 4, 1936, water-stage recorder at site 0.65 mile upstream at different datum.

AVERAGE DISCHARGE.--53 years (1909-19, 1920-21, 1922-24, 1929-35, 1938-72), 251 cfs (24.00 inches per year).

EXTREMES.--Current year: Maximum daily discharge, 2,510 cfs May 6; minimum daily, 34 cfs Sept. 28.

Period of record: Maximum discharge, 3,900 cfs Mar. 20, 1936 (gage height, 5.76 ft, site and datum then in use), from rating curve extended above 2,800 cfs on basis of computation of peak flow over dam; minimum daily, 2.6 cfs June 18, 1956.

REMARKS.--Records fair. Flow regulated by powerplant and reservoirs above station and, since Mar. 6, 1957, by diversion around station through canal and penstock of powerplant below station. Diversion computed from relation of kilowatt-hour output and measured discharge; discharge computed by adding flow over control to flow diverted through powerplant.

COOPERATION.--Records of power generation furnished by Citizens Utilities Co.

REVISIONS (WATER YEARS).--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	136	101	83	204	200	309	762	251	122	194	180
2	107	135	105	86	179	200	282	976	198	142	182	55
3	53	123	84	200	186	184	287	1,420	67	257	198	37
4	117	118	68	192	183	40	291	1,840	308	155	184	37
5	121	120	38	197	88	40	322	2,370	334	221	39	37
6	84	72	145	150	36	217	371	2,510	257	202	116	37
7	148	45	119	185	177	193	255	2,390	338	211	242	37
8	71	136	129	126	161	152	250	2,130	293	85	215	37
9	36	130	148	99	97	195	262	1,920	295	112	233	37
10	37	127	137	188	150	180	283	1,670	366	231	221	79
11	178	166	105	172	144	98	255	1,440	368	183	210	37
12	164	121	177	196	70	37	275	1,250	370	184	111	37
13	197	131	258	182	110	179	266	1,090	365	44	72	37
14	197	78	186	195	183	215	291	988	271	112	257	83
15	267	173	231	175	166	202	282	919	340	86	196	79
16	268	78	250	200	179	157	289	886	292	63	196	36
17	270	140	256	210	170	272	372	897	260	174	205	36
18	173	153	220	220	166	306	372	876	254	166	218	64
19	203	125	222	219	90	66	381	816	247	178	36	60
20	234	86	259	216	73	265	384	734	258	167	38	146
21	149	38	228	228	238	411	449	653	243	251	196	123
22	187	176	243	184	132	408	633	590	239	142	185	36
23	131	158	175	179	106	372	676	532	242	189	196	36
24	170	183	156	215	187	373	704	464	140	183	190	36
25	140	108	144	227	114	286	709	410	86	253	186	36
26	140	113	174	225	72	373	690	367	253	210	55	53
27	172	99	214	120	60	294	666	346	208	190	43	43
28	137	58	201	195	199	298	621	365	211	182	178	34
29	110	151	206	63	177	365	623	218	199	37	177	58
30	65	172	211	102	-----	312	548	237	241	48	179	36
31	37	-----	124	209	-----	293	-----	239	-----	234	169	-----
TOTAL	4,607	3,630	5,314	5,418	4,117	7,191	12,588	32,305	7,795	5,072	5,117	1,678
MEAN	149	121	171	175	142	232	419	1,042	260	164	165	55.9
MAX	270	176	259	228	238	411	709	2,510	370	257	257	180
MIN	34	38	38	63	36	37	282	218	67	37	36	34
CFSM	1.05	.85	1.20	1.23	1.00	1.63	2.95	7.34	1.83	1.15	1.16	.39
IN.	1.21	.95	1.39	1.42	1.08	1.88	3.29	8.46	2.04	1.33	1.34	.44

CAL YR 1971 TOTAL 93,657 MEAN 257 MAX 1,600 MIN 32 CFSM 1.61 IN 24.54

WTR YR 1972 TOTAL 94,812 MEAN 259 MAX 2,510 MIN 34 CFSM 1.42 IN 24.84

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

249

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years or use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second, a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1972

Discharge measurements made at low-flow partial-record stations during water year 1972						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Merrimack River basin						
01093900	Tucker Brook near Wilton, N.H.	Lat 42°49'44", long 71°42'13", Hillsborough County, at bridge on Whitten Rd., 2 miles southeast of Wilton.	2.70	1964-65, 1967-68, 1970-72	9-13-72	0.03
01093910	Tucker Brook near Milford, N.H.	Lat 42°50'26", long 71°40'59", Hillsborough County, at culvert on State Highway 101, 1.5 miles west of Milford.	3.88	1964-65, 1967-68, 1970-72	9-13-72	0
01094010	Naticook Brook near South Merrimack, N.H.	Lat 42°49'44", long 71°30'56", Hillsborough County, at culvert just below Green Pond, and 2.7 miles northeast of South Merrimack.	1.36	1964-65, 1967-68, 1970-72	9-13-72	0
01094020	Naticook Brook near Merrimack, N.H.	Lat 42°50'26", long 71°29'56", Hillsborough County, at culvert on Amherst Rd., 1.5 miles southeast of Merrimack and 0.5 mile west of Thornton's Ferry.	2.23	1964-65, 1967-68, 1970-72	9-13-72	.01
01094040	Chase Brook near Hudson Center, N.H.	Lat 42°48'55", long 71°24'32", Hillsborough County, at culvert on Robinson Rd., 3 miles north of Hudson Center.	1.73	1964-65, 1967-68, 1970-72	9-13-72	.15
01094050	Chase Brook near Litchfield, N.H.	Lat 42°48'50", long 71°28'15", Hillsborough County, at culvert on State Highway 3A, 2 miles south of Litchfield.	8.24	1964-65, 1967-68, 1970-72	9-13-72	1.7
01094150	Witches Brook near Panemah, N.H.	Lat 42°47'35", long 71°35'59", Hillsborough County, at bridge on State Highway 122, 2.2 miles south of Panemah.	4.28	1964-65, 1967-68, 1970-72	9-13-72	1.6
01094350	Flag Brook near Westminster, Mass.	Lat 42°32'07", long 71°51'01", Worcester County, at access road to Fitchburg municipal dump, 0.5 mile above Sawmill Pond, 3 miles east of Westminster.	1.28	1971-72	10-19-71 8-24-72 9-25-72	.63 1.0 a .88
01094430	Falulah Brook at Fitchburg, Mass.	Lat 42°35'22", long 71°46'54", Worcester County, at bridge on Pearl St., 0.4 mile east of State Teachers College, Fitchburg.	b 12.0	1972	8-24-72 9-25-72 9-29-72	.41 a .84 .35
01094460	Monoosnoc Brook at Leominster, Mass.	Lat 42°31'47", long 71°45'08", Worcester County, at bridge on Whitney St., Leominster, 2,500 ft northeast of intersection of Mechanic St. and Main St.	11.0	1971-72	10-4-71 10-20-71 8-24-72 9-28-72	1.1 .98 3.6 1.7
01094480	Fall Brook at Leominster, Mass.	Lat 42°30'32", long 71°44'43", Worcester County, at culvert on Elm Hill Ave., Leominster, 2,200 ft above State Highway 117.	5.82	1971-72	10-1-71 10-20-71 8-24-72 9-28-72	3.2 2.7 4.4 7.5
01094550	Wekepeke Brook near Lancaster, Mass.	Lat 42°29'19", long 71°42'51", Worcester County, at bridge on State Highway 117, 3 miles northwest of Lancaster.	11.5	1971-72	10-1-71 10-4-71 10-22-71 8-23-72 9-25-72	4.0 3.3 4.6 4.7 a 6.0
01094750	Wausacum Brook near Sterling, Mass.	Lat 42°24'34", long 71°45'56", Worcester County, 300 ft below outlet of West Wausacum Pond, 2 miles south of Sterling.	4.98	1971-72	10-1-71 10-20-71 8-23-72 9-27-72	.09 .26 .55 1.3
01094760	Wausacum Brook near West Boylston, Mass.	Lat 42°23'49", long 71°46'45", Worcester County, at culvert on Prescott St., 1.5 miles north of intersection of State Highways 12, 110, and 140, in West Boylston.	7.42	1971-72	10-1-71 10-20-71 8-23-72 9-27-72	.29 .62 .78 1.7

a May not be base flow.

b Adjusted for diversion to North Nashua River basin.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1972.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1972.--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Merrimack River basin.--Continued						
01095050	Stillwater River at Moares Corners, near Sterling, Mass.	Lat 42°26'00", long 71°48'41", Worcester County, at bridge on State Highway 62, at Moares Corners, 2.5 miles west of Sterling.	25.7	1971-72	10-20-71 8-23-72 9-28-72	5.1 4.4 3.9
01095220	Stillwater River near Sterling, Mass.	Lat 42°24'39", long 71°47'30", Worcester County, at bridge on Muddy Pond Rd., 2.5 miles southwest of Sterling.	30.3	1971-72	10-20-71 8-23-72 9-28-72	5.6 6.1 5.7
01095330	Quinapaxet River near Holden, Mass.	Lat 42°22'50", long 71°51'23", Worcester County, at culvert on Mills St., 2 miles north of Holden Center.	21.8	1971-72	10- 1-71 10-19-71 8-25-72 9-27-72	.53 .68 .92 .93
01095360	Asnebumskit Brook at Jefferson, Mass.	Lat 42°21'40", long 71°53'05", Worcester County, at culvert on State Highway 122A, at Jefferson, 1 mile west of Holden Center.	-	1971-72	10- 1-71 10-19-71 8-25-72 9-25-72 9-29-72	.48 .48 .98 a .86 .85
01095370	Asnebumskit Brook near Holden, Mass.	Lat 42°22'24", long 71°51'14", Worcester County, at culvert on Mills St., 1.5 miles north of Holden Center.	-	1971-72	10- 1-71 10-19-71 8-25-72 9-25-72 9-29-72	1.7 1.8 3.9 a 3.7 3.1
01095380	Trout Brook near Holden, Mass.	Lat 42°23'00", long 71°50'12", Worcester County, at culvert on Manning St., 2.2 miles north of Holden Center.	6.80	1971-72	10-19-71 8-23-72 9-27-72	1.1 .97 1.2
01095410	Malden Brook at Oakdale, Mass.	Lat 42°22'53", long 71°47'45", Worcester County, at culvert on Thomas St., Oakdale, 0.5 mile south of intersection of Thomas St. and State Highway 140.	1.26	1971-72	10-18-71 8-23-72 8-25-72 9-25-72 9-29-72	.46 .93 .83 a .83 c .63
01095430	Gates Brook at West Boylston, Mass.	Lat 42°21'29", long 71°46'44", Worcester County, at culvert on State Highway 140, at West Boylston, 0.2 mile south of intersection of State Highways 12 and 140.	2.80	1971-72	10- 1-71 10-19-71 8-25-72	.51 .80 .52
01095840	Catacoonamug Brook at Shirley, Mass.	Lat 42°32'38", long 71°39'25", Middlesex County, at culvert on Lancaster Rd., Shirley, 1 mile above mouth.	19.1	1971-72	8-25-72	7.2
01095880	Nonatacus Brook near Ayer, Mass.	Lat 42°33'43", long 71°36'36", Middlesex County, 200 ft above mouth, 1.2 miles west of Ayer.	18.8	1971-72	10-20-71 8-24-72 9-28-72	2.2 4.1 6.9
01095910	Mulpus Brook near Lunenburg, Mass.	Lat 42°35'46", long 71°40'15", Worcester County, at culvert on State Highway 225, 2.2 miles east of Lunenburg.	10.4	1971-72	10-21-71 8-24-72	1.5 2.0
01095915	Mulpus Brook near Shirley, Mass.	Lat 42°34'26", long 71°37'43", Middlesex County, at culvert on State Highway 2A, 2.5 miles northeast of Shirley.	15.7	1971-72	10-21-71 8-24-72 8-24-72 9-25-72	1.9 3.9 4.1 a 3.9
01095930	Willard Brook near West Townsend, Mass.	Lat 42°40'27", long 71°46'14", Middlesex County, at culvert on State Highway 119, 1,500 ft west of intersection of State Highway 119 and Wheeler Rd., 1.5 miles west of West Townsend.	b 12.3	1971-72	10- 1-71 10-22-71 9-26-72	.94 1.6 a 1.9
01095940	Locke Brook at West Townsend, Mass.	Lat 42°40'42", long 71°45'31", Middlesex County, at culvert on West Meadow Rd., West Townsend, 0.5 mile above mouth.	4.20	1971-72	10-22-71 9- 2-72	.43 c .20
01095950	Mason Brook near West Townsend, Mass.	Lat 42°42'05", long 71°45'10", Middlesex County, 2,200 ft south of New Hampshire state line and 2 miles northwest of West Townsend.	9.30	1971-72	10- 4-71 10-22-71 8-23-72 9-26-72	.11 .53 .42 a .21
01095960	Walker Brook near West Townsend, Mass.	Lat 42°42'07", long 71°46'06", Middlesex County, at culvert on State Highway 124, 2 miles northwest of West Townsend.	5.83	1971-72	10- 1-71 10-22-71 8-23-72 9-26-72	.17 .65 .16 a .25
01095970	Pearl Hill Brook near West Townsend, Mass.	Lat 42°39'40", long 71°45'13", Middlesex County, 1,800 ft below Pearl Hill Brook Pond, 1.5 miles southwest of West Townsend.	5.95	1971-72	10- 1-71 10-22-71 8-23-72 9-26-72	.99 1.4 2.2 a 2.1

a May not be base flow.

b Adjusted for diversion to North Nashua River basin.

c Field estimate.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

251

Discharge measurements made at low-flow partial-record stations during water year 1972.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1972.--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Merrimack River basin.--Continued						
01095980	Squannacook River at Townsend, Mass.	Lat 42°39'45", long 71°42'33", Middlesex County, at bridge on Elm St., Townsend, 1,800 ft southwest of intersection of Main St. and Elm St.	b51.1	1971-72	10-22-71 8-24-72 9-26-72	11 16 a12
01096200	James Brook near Ayer, Mass.	Lat 42°34'46", long 71°35'20", Middlesex County, at culvert on State Highway 111, 1.5 miles north of Ayer.	3.91	1971-72	10-21-71 8-24-72 9-25-72	.73 .62 a .70
01096300	Robinson Brook near Pepperell, Mass.	Lat 42°37'52", long 71°36'32", Middlesex County, at culvert on Shirley St., 2.5 miles southwest of Pepperell.	3.09	1971-72	10-22-71 8-23-72 9-26-72	.18 .42 a1.2
01096502	Nisittisitt River near Hollis, N.H.	Lat 42°42'20", long 71°37'18", Hillsborough County, 500 ft above bridge on Pepperell Rd., 3 miles southwest of Hollis.	47.6	1971-72	10- 4-71 10-21-71 8-23-72 9-28-72	2.7 7.1 5.1 6.7
01096503	Nisittisitt River at Pepperell, Mass.	Lat 42°40'19", long 71°34'39", Middlesex County, at bridge on Canal St., Pepperell, 4,000 ft above mouth.	59.6	1971-72	10- 4-71 10-21-71 8-23-72 9-28-72	3.9 7.6 8.8 11
01096504	Reedy Meadow Brook at East Pepperell, Mass.	Lat 42°40'03", long 71°33'55", Middlesex County, at culvert on Lowell Rd., East Pepperell, 2,000 ft above mouth.	1.94	1971-72	10- 4-71 10-21-71 8-23-72 9-26-72	.58 .64 1.5 a .96
01096505	Unkety Brook near Pepperell, Mass.	Lat 42°41'23", long 71°32'54", Middlesex County, at culvert on River St., 2.5 miles northeast of Pepperell.	6.84	1971-72	10- 4-71 10-21-71 8-23-72 9-26-72	1.1 1.8 2.7 a2.4
01096510	Merrimack River tributary at Hudson Center, N.H.	Lat 42°46'51", long 71°24'50", Hillsborough County, at culvert on Greeley Rd., 0.8 mile north of Hudson Center.	1.33	1964-65, 1967-68, 1970-72	9-13-72	.13
01096520	Old Maids Brook near Nashua, N.H.	Lat 42°43'13", long 71°28'22", Hillsborough County, at culvert on Browning St., 1.6 miles south of Nashua.	.30	1964-65, 1967-68, 1970-72	9-13-72	.02
01096530	Musquash Brook tributary near Hudson, N.H.	Lat 42°43'14", long 71°23'18", Hillsborough County, at culvert 0.25 mile above mouth and 4 miles southeast of Hudson.	1.50	1964-65, 1967-68, 1970-72	9-13-72	.04
01100550	Porcupine Brook at Pelham Road, near Salem Depot, N.H.	Lat 42°46'23", long 71°15'24", Rockingham County, at culvert on Pelham Rd., 2.4 miles west of Salem Depot.	1.72	1964-65, 1968, 1970-72	9-13-72	0
01100560	Porcupine Brook at Highway 38, near Salem Depot, N.H.	Lat 42°45'57", long 71°14'11", Rockingham County, at culvert on State Highway 38, 1.8 miles southwest of Salem Depot.	5.49	1964-65, 1967-68, 1970-72	9-13-72	0
Weweeantic River basin						
01105905	Sippican River near Marion, Mass.	Lat 41°44'05", long 70°46'30", Plymouth County, at bridge on County Rd., 2.5 miles north of Marion.	28.1	1972	8-14-72	18
Aucaut Creek basin						
01105908	Aucaut Creek near Marion, Mass.	Lat 41°41'05", long 70°46'25", Plymouth County, at culvert on U. S. Highway 6, 1.5 miles south of Marion.	2.71	1972	8-14-72	1.4
Mattapoisett River basin						
01105911	Mattapoisett River at Rounseville Rd., near Rochester, Mass.	Lat 41°44'10", long 70°51'45", Plymouth County, at bridge on Rounseville Rd., 2.2 miles west of Rochester, Mass.	11.2	1972	8-14-72	3.6
01105914	Mattapoisett River at Tinkham Lane, near Mattapoisett, Mass.	Lat 41°41'05", long 70°50'30", Plymouth County, at bridge on Tinkham Lane, 2 miles northwest of Mattapoisett.	18.2	1972	8-14-72	5.3
01105917	Mattapoisett River near Mattapoisett, Mass.	Lat 41°39'45", long 70°50'20", Plymouth County, 0.4 mile above bridge on U. S. Highway 6, 1.5 miles west of Mattapoisett.	d24.0	1965 e, 1972	8-14-72	6.9
01105921	Swift Brook near Mattapoisett, Mass.	Lat 41°38'50", long 70°49'40", Plymouth County, at culvert 0.1 mile above Mattapoisett Neck Rd., 1 mile southwest of Mattapoisett.	1.18	1972	8-23-72	0

a May not be base flow.

b Adjusted for diversion to North Nashua River basin.

d Revised.

e Published in table of miscellaneous measurements.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1972.--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Acushnet River basin						
01105924	Acushnet River at Leonard Street, near Acushnet, Mass.	Lat 41°43'25", long 70°53'50", Bristol County, at bridge on Leonard St., 2.5 miles north of Acushnet.	7.51	1972	8-23-72	4.7
01105926	Acushnet River at Acushnet, Mass.	Lat 41°41'45", long 70°54'52", Bristol County, at bridge on Hamlin Rd., 1 mile north of Acushnet.	16.4	1972	8-23-72	6.6
Buttonwood Brook basin						
01105928	Buttonwood Brook near South Dartmouth, Mass.	Lat 41°36'15", long 70°57'20", Bristol County, at bridge on Russells Mills Rd., 1.5 miles northwest of South Dartmouth.	2.93	1972	8-23-72	.30
Stacum River basin						
01105933	Paskamanset River near South Dartmouth, Mass.	Lat 41°35'07", long 70°59'25", Bristol County, at bridge on Russells Mills Rd., 3 miles west of South Dartmouth.	26.1	1972	8-23-72	4.0
01105935	Destruction Brook near South Dartmouth, Mass.	Lat 41°34'20", long 71°00'50", Bristol County, at bridge on Slades Corner Rd., 5 miles southwest of South Dartmouth.	2.63	1972	8-24-72	1.2
East Branch Westport River basin						
01105937	Shingle Island River near North Dartmouth, Mass.	Lat 41°40'50", long 71°01'05", Bristol County, at bridge on Old Fall River Rd., 3 miles northwest of North Dartmouth.	8.31	1972	8-24-72	1.4
01105943	Shingle Island River at Hixville Pond near North Dartmouth, Mass.	Lat 41°40'10", long 71°01'32", Bristol County, at culvert on Hixville Rd., 3 miles northwest of North Dartmouth.	18.1	1972	8-24-72	4.4
01105947	Bread and Cheese Brook at Head of Westport, Mass.	Lat 41°38'00", long 71°03'46", Bristol County, at culvert on State Highway 177, 1 mile north of Head of Westport.	8.70	1972	8-24-72	.91
*01105950	Kirby Brook near Head of Westport, Mass.	Lat 41°36'02", long 71°04'25", Bristol County, at culvert on Drift Rd., 1.5 miles south of Head of Westport.	3.69	1965, 1972	8-24-72	.04
West Branch Westport River basin						
01106005	Angeline Brook near Westport Point, Mass.	Lat 41°33'05", long 71°06'20", Bristol County, at culvert on Cornell Rd., 2.5 miles northwest of Westport Point.	3.22	1972	8-24-72	13
Lee River basin						
01109130	Lewin Brook at Swansea, Mass.	Lat 41°44'55", long 71°11'45", Bristol County, at culvert on Stevens Rd., at Swansea.	2.83	1972	8-24-72	.07
Cole River basin						
01109135	Cole River near Swansea, Mass.	Lat 41°46'30", long 71°12'00", Bristol County, at bridge on Hortonville Rd., 2 miles north of Swansea.	7.79	1972	8-24-72	55
Palmer River basin						
01109195	East Branch Palmer River at Rehoboth, Mass.	Lat 41°50'30", long 71°14'35", Bristol County, at bridge on State Highway 118, at Rehoboth.	11.7	1972	8-25-72	1.6
01109215	Palmer River near Rehoboth, Mass.	Lat 41°49'50", long 71°16'55", Bristol County, at bridge on Summer St., 2 miles southwest of Rehoboth.	23.0	1972	8-25-72	5.8
01109225	Rocky Run near Rehoboth, Mass.	Lat 41°46'52", long 71°15'05", Bristol County, at culvert on Davis St., 4 miles south of Rehoboth.	7.37	1972	8-24-72	1.1
Runnins River basin						
*01109270	Runnins River at Seekonk, Mass.	Lat 41°49'25", long 71°20'00", Bristol County, at culvert on Pleasant St., 1 mile north of Seekonk.	4.24	1972	8-25-72	.79

* Also a crest-stage gage.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

253

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Saco River basin							
01064380	East Branch Saco River near Lower Bartlett, N.H.	Lat 44°07'21", long 71°07'50", Carroll County, at bridge on gravel road, 1.7 miles northeast of Lower Bartlett.	32.0	1967-72	5-15-72	0.40	920
Merrimack River basin							
01074500	East Branch Pemigewasset River near Lincoln, N.H.	Lat 44°03'23", long 71°38'18", Grafton County, at dam of Franconia Paper Company, 0.9 mile below Clear Brook, 1.2 miles below former gaging station, and 1.8 miles northeast of Lincoln.	109	1929-53†, 1968-72	-	(a)	< 2,800
01081900	Town Line Brook tributary near Peterborough, N.H.	Lat 42°51'09", long 71°54'14", Hillsborough County, at culvert on Route 101, 2.8 miles east of Peterborough and 5 miles west of West Wilton.	.75	1971-72	-	(a)	< 63
01082490	Mud Pond tributary near Dublin, N.H.	Lat 42°54'08", long 72°01'52", Cheshire County, at culvert on secondary dead-end road, 0.3 mile west of Bonds Corner, and 0.1 mile south of N.H. Highway 101.	1.39	1971-72	4-20-72	15.61	31
01084500	Beards Brook near Hillsboro, N.H.	Lat 43°06'51", long 71°55'36", Hillsborough County, 300 ft above bridge on State Highway 9, 500 ft above mouth, and 1.5 miles west of Hillsboro.	55.4	1946-70‡, 1971-72	4-20-72	4.64	1,100
01089500	Suncook River at North Chichester, N.H.	Lat 43°15'23", long 71°22'10", Merrimack County, 100 ft below bridge on Depot Road at North Chichester and 3.1 miles above Little Suncook River.	157	1918-27‡, 1929-70‡, 1971-72	6-23-72	c9.39	b 2,000
01094006	McQuade Brook near Bedford, N.H.	Lat 42°55'45", long 71°33'20", Hillsborough County, at culvert on North Amherst Road at junction with Hardy Road, 2.3 miles southwest of Bedford.	4.13	1971-72	3-18-72	14.90	50
01095200	Houghton Brook near Oakdale, Mass.	Lat 42°24'57", long 71°48'12", Worcester County, at culvert on State Highway 140, 2 miles north of Oakdale.	.69	1964-72	3-18-72	7.17	21
01095800	Easter Brook near North Leominster, Mass.	Lat 42°32'46", long 71°42'45", Worcester County, at culvert on Lancaster Ave., 1.5 miles east of North Leominster.	.92	1964-72	3-23-72	13.70	40
01097200	Heath Hen Meadow Brook at Stow, Mass.	Lat 42°26'44", long 71°30'02", Middlesex County, at culvert on West Acton Rd., 0.7 mile northeast of Stow.	3.89	1964-72	3-23-72	5.79	65
01097452	Jackstraw Brook at Hopkinton Road, Westborough, Mass. d	Lat 42°15'28", long 71°36'13", Worcester County, at culvert on Hopkinton Road (Route 135), 0.9 mile southeast of Westborough.	1.24	1972	3-23-72	8.65	53
01098700	Hayward Brook at Wayland, Mass.	Lat 42°21'40", long 71°20'51", Middlesex County, at culvert on U.S. Highway 20, 0.7 mile east of Wayland.	2.32	1964-72	5- 4-72	7.17	37
01100100	Richardson Brook near Lowell, Mass.	Lat 42°39'48", long 71°16'02", Middlesex County, at culvert on Methuen St., 2 miles northeast of Lowell.	4.32	1963-72	3- 4-72	13.23	132
01100800	Cobbler Brook near Merrimac, Mass.	Lat 42°50'55", long 71°01'10", Essex County, at culvert on Highland St., 1.3 miles northwest of Merrimac.	.77	1963-72	3-23-72	8.29	39
Parker River basin							
01100900	Parker River tributary near Georgetown, Mass.	Lat 42°44'03", long 70°58'22", Essex County, at culvert on North St., 1.2 miles northeast of Georgetown.	0.65	1964-72	3-24-72	10.64	19
Charles River basin							
01104600	Beaver Brook at Belmont, Mass.	Lat 42°23'26", long 71°11'51", Middlesex County, at culvert on State Highway 60 (Trapelo Rd.), 1 mile southwest of Belmont.	4.09	1963-72	6- 5-72	11.52	140

‡ Operated as a continuous-record gaging station.

a Peak stage did not reach bottom of the gage.

b About.

c Backwater from ice.

d New site. Station 0.4 mile upstream discontinued.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1972.--Continued

Annual maximum discharge at partial-record stations during water year 1972.--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Neponset River basin							
01104900	Mill Brook at Westwood, Mass.	Lat 42°12'21", long 71°14'26", Norfolk County, at culvert on State Highway 109, at Westwood.	1.52	1964-72	3- 3-72	6.89	29
01105550	Plantingfield Brook at Norwood, Mass.	Lat 42°12'17", long 71°11'13", Norfolk County, at culvert on State Highway 1, 1.0 mile northeast of Norwood.	1.52	1964-70	3- 3-72	14.18	165
South River basin							
01105850	Furnace Brook near Marshfield, Mass.	Lat 42°06'30", long 70°43'53", Plymouth County, at culvert on Furnace St., 1.7 miles northwest of Marshfield.	1.61	1964-72	9- 3-72	10.03	75
East Branch Westport River basin							
*01105950	Kirby Brook near Head of Westport, Mass.	Lat 41°36'02", long 71°04'25", Bristol County, at culvert on Drift Rd., 1.5 miles south of Head of Westport.	3.69	1964-72	6-19-72	10.05	211
Cold Brook basin							
01106100	Cold Brook near Adamsville, R.I.	Lat 41°32'37", long 71°09'05", Newport County, at culvert on Cold Brook Rd., 1.3 miles southwest of Adamsville.	1.15	1966-72	6-19-72	10.90	76
Taunton River basin							
01106485	Meadow Brook tributary near Whitman, Mass.	Lat 42°04'11", long 70°57'34", Plymouth County, at culvert on Auburn St., 1.3 miles southwest of Whitman.	1.04	1967-72	3-17-72	6.19	25
01108100	Snows Brook near Bridgewater, Mass.	Lat 41°56'53", long 70°59'37", Plymouth County, at culvert on Cross St., 3 miles south of Bridgewater.	1.41	1964-72	3-18-72	7.13	27
01109050	Threemile River tributary near Oakland, Mass.	Lat 41°55'38", long 71°09'17", Bristol County, at culvert on State Highway 140, 1.3 miles northwest of Oakland.	.50	1964-72	3-18-72	6.46	11
01109075	Halloway Brook near Myricks, Mass.	Lat 41°49'34", long 70°59'25", Plymouth County, at culvert on Pickens St., 2.0 miles east of Myricks.	1.16	1967-72	3- 3-72	6.26	34
01109085	Quaker Brook near Myricks, Mass.	Lat 41°49'29", long 71°03'18", Bristol County, at culvert on Bryant St., 1.5 miles southwest of Myricks.	1.94	1967-72	3-17-72	8.59	66
01109100	Taunton River tributary near Fall River, Mass.	Lat 41°45'31", long 71°07'01", Bristol County, at culvert on State Highway 79, 4 miles northeast of Fall River.	.25	1964-72	3- 3-72	10.97	47
Runnins River basin							
*01109270	Runnins River at Seekonk, Mass.	Lat 41°49'25", long 71°20'00", Bristol County, at culvert on Pleasant St., 1.0 mile north of Seekonk.	4.24	1967-72	3- 3-72	6.31	83
Metacomet Brook basin							
01109300	Metacomet Brook at East Providence, R.I.	Lat 41°48'19", long 71°22'25", Providence County, at culvert on South Broadway at East Providence.	0.82	1966-72	3- 3-72	12.86	183
Blackstone River basin							
01111250	Dry Arm Brook near Wallum Lake, R.I.	Lat 41°58'22", long 71°45'03", Providence County, at culvert on State Highway 100, 1.8 miles south of Wallum Lake.	1.74	1966-72	3- 3-72	9.27	90
01111450	Mavry Paine Brook near Chepachet, R.I.	Lat 41°55'19", long 71°37'26", Providence County, at culvert on Cooper Rd., 2.5 miles northeast of Chepachet.	1.87	1966-72	3- 3-72	8.63	106
01112300	Bungey Brook near Sheldonville, Mass.	Lat 42°01'29", long 71°27'24", Bristol County, at culvert on Wrentham St., 3.5 miles west of Sheldonville.	2.66	1964-72	3- 3-72	6.88	85
01113600	Blackstone River tributary No. 2 at Berkeley, R.I.	Lat 41°55'27", long 71°24'49", Providence County, at culvert on State Highway 122, 0.5 mile southeast of Berkeley.	1.04	1966-72	3- 3-72	6.22	38
Pawtuxet River basin							
01115200	Shippes Brook tributary at North Foster, R.I.	Lat 41°49'53", long 71°45'10", Providence County, at culvert on Willoughby Young Rd., at North Foster.	0.55	1966-72	3- 3-72	9.88	45
01115300	Wilbur Hollow Brook near Clayville, R.I.	Lat 41°46'06", long 71°38'03", Providence County, at culvert on State Highway 12, 2.3 miles east of Clayville.	4.61	1966-72	3- 3-72	13.50	225
01115830	Bear Brook near Coventry, R.I.	Lat 41°39'37", long 71°37'42", Kent County, at culvert on Fish Hill Rd., 3 miles south of Coventry.	3.98	1966-72	3- 3-72	9.98	152
01116600	Pocomasset River near North Scituate, R.I.	Lat 41°50'13", long 71°31'49", Providence County, at culvert on Belfield Drive, 3 miles east of North Scituate.	1.34	1966-72	3- 3-72	9.22	54
Hardig Brook basin							
01116650	Hardig Brook near West Warwick, R.I.	Lat 41°41'38", long 71°28'52", Providence County, at culvert on Hardig Rd., 2.5 miles southeast of West Warwick.	3.16	1966-72	3- 3-72	4.08	133

* Also a low-flow partial-record station.

* Also a low-flow partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

255

Annual maximum discharge at crest-stage partial-record stations during water year 1972.--Continued

Annual maximum discharge of crest-stage partial-record stations during water year 1972--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Potowomut River basin							
01116870	Frenchtown Brook near Davisville, R.I.	Lat 41°37'47", long 71°30'51", Providence County, at culvert on Tillinghast Rd., 2.3 miles northwest of Davisville.	3.12	1966-72	3-17-72	4.28	45
Smelt Brook basin							
01117250	Browns Brook at Wakefield, R.I.	Lat 41°25'56", long 71°31'24", Washington County, at culvert on Tuckertown Rd., 1 mile southwest of Wakefield.	.50	1966-72	6-19-72	10.56	19
Pawcatuck River basin							
01117400	Glen Rock Brook tributary at Usquepog, R.I.	Lat 41°31'04", long 71°36'18", Washington County, at culvert on Glen Rock Rd., 1 mile north of Usquepog.	1.04	1966-72	6-19-72	5.61	68
01117820	Wood River tributary near Arcadia, R.I.	Lat 41°34'32", long 71°42'52", Washington County, at culvert on State Highway 165, 1.8 miles northwest of Arcadia.	.77	1966-72	6-19-72	8.47	15
01118020	Perry Healy Brook near Bradford, R.I.	Lat 41°22'41", long 71°43'42", Washington County, at culvert on State Highway 216, 2 miles southeast of Bradford.	1.82	1966-72	6-19-72	8.35	54
Thames River basin							
01123160	Wales Brook tributary near Wales, Mass.	Lat 42°04'48", long 72°11'51", Hampden County, at culvert on Holland Rd., 1.5 miles northeast of Wales.	0.71	1964-72	3-22-72	8.47	36
01124050	Tufts Branch at Dudley, Mass.	Lat 42°03'11", long 71°56'22", Worcester County, at culvert on Dudley-Southbridge Rd., 0.7 mile northwest of Dudley.	1.06	1963-72	3-22-72	12.51	106
Connecticut River basin							
01129400	Black Brook at Averill, Vt.	Lat 45°00'14", long 71°41'34", Essex County, at culvert on State Highway 114, 1 mile northeast of Averill.	0.58	1964-72	5- 4-72	11.39	28
01129700	Paul Stream tributary near Brunswick, Vt.	Lat 44°41'06", long 71°37'18", Essex County, at culvert on macadam road leading to Maidstone Lake, 3.5 miles south of Brunswick.	1.29	1966-72	5- 4-72	9.72	56
01133200	Quimby Brook near Lyndonville, Vt.	Lat 44°34'52", long 71°59'11", Caledonia County, at culvert on dirt road, 3.5 miles north of Lyndonville.	2.32	1964-72	5- 4-72	13.51	200
01133300	Cold Hill Brook near Lyndon, Vt.	Lat 44°31'47", long 72°03'01", Caledonia County, at culvert on dirt road, 2 miles northwest of Lyndon.	1.52	1964-72	5- 4-72	12.74	112
01135700	Joes Brook tributary near East Barnet, Vt.	Lat 44°20'40", long 72°03'52", Caledonia County, at culvert on dirt road, 1.8 miles northwest of East Barnet.	.76	1964-72	5- 4-72	11.01	33
01138800	Keenan Brook at Gratton, Vt.	Lat 44°12'10", long 72°12'05", Caledonia County, at culvert on macadam road, 0.6 mile south of Gratton.	4.26	1964-72	5- 4-72	14.98	192
01139700	Waits River tributary near West Topsham, Vt.	Lat 44°08'29", long 72°13'52", Orange County, at culvert on U. S. Highway 302, 2 miles north of West Topsham.	1.09	1964-72	5- 4-72	10.69	84
01140100	South Branch Waits River tributary near Bradford Center, Vt.	Lat 44°01'14", long 72°12'14", Orange County, at culvert on macadam road, 2 miles northwest of Bradford Center.	.27	1964-72	4-20-72	10.42	5
01140800	West Branch Ompompa-naasuc River tributary at South Strafford, Vt.	Lat 43°49'56", long 72°22'20", Orange County, at culvert on dirt road at South Strafford.	1.33	1964-72	5- 4-72	11.48	92
01142400	Third Branch White River tributary at Randolph, Vt.	Lat 43°55'54", long 72°40'58", Orange County, at culvert on State Highway 12A, 1 mile northwest of Randolph.	.77	1964-72	4-20-72	10.27	31
01151200	Otteauquechee River tributary near Quechee, Vt.	Lat 43°39'37", long 72°25'55", Windsor County, at culvert on Quechee Rd., 1.2 miles northwest of Quechee.	.82	1964-72	5- 4-72	9.97	20
01153300	Middle Branch Williams River tributary at Chester, Vt.	Lat 43°16'13", long 72°36'32", Windsor County, at culvert on macadam road at Chester.	3.16	1964-72	5-17-72	19.50	170
01153800	Bull Creek tributary near Athens, Vt.	Lat 43°06'08", long 72°34'55", Windham County, at culvert on gravel road, 2 miles southwest of Athens.	.60	1967-72	4-20-72	10.62	16
01155350	West River tributary near Jamaica, Vt.	Lat 43°07'32", long 72°48'47", Windham County, at culvert on State Highway 100, 2.5 miles northwest of Jamaica.	.90	1964-72	4-20-72	8.52	34

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1972.--Continued

Annual maximum discharge at cross-stage partial-record stations during water year 1972.--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Connecticut River basin--Continued							
01156300	Whetstone Brook tributary near Marlboro, Vt.	Lat 42°52'42", long 72°42'30", Windham County, at culvert on State Highway 9, 1.5 miles northeast of Marlboro.	1.05	1963-72	4-20-72	4.22	52
01156450	Connecticut River tributary near Vernon, Vt.	Lat 42°47'01", long 72°31'57", Windham County, at culvert on macadam road, 1.5 miles northwest of Vernon.	1.12	1964-72	4-20-72	8.67	48
01161300	Millers Brook at Northfield, Mass.	Lat 42°41'07", long 72°27'11", Franklin County, at culvert on Beers Plain Rd., 0.8 mile south of Northfield.	2.33	1964-72	3-18-72	15.61	75
01163100	Wildor Brook near Gardner, Mass.	Lat 42°35'42", long 72°00'53", Worcester County, at culvert on Clark St., 1.5 miles northwest of Gardner.	2.50	1964-72	3-23-72	12.18	56
01170200	Allen Brook near Shelburne Falls, Mass.	Lat 42°36'46", long 72°40'02", Franklin County, at culvert on Peckville Rd., 3.5 miles east of Shelburne Falls.	.73	1964-72	6- 1-72	6.65	38
01170900	Mill River near South Deerfield, Mass.	Lat 42°28'09", long 72°38'31", Franklin County, at culvert on North St., 2 miles southwest of South Deerfield.	6.37	1963-72	3-17-72	11.88	206
01171200	Scarboro Brook at Dwight, Mass.	Lat 42°19'44", long 72°26'47", Hampshire County, at culvert on State Highway 9, at Dwight.	2.92	1963-66, 1968-72	3-22-72	14.81	80
01171910	Broad Brook near Holyoke, Mass.	Lat 42°11'59", long 72°41'11", Hampden County, at culvert on Keys Rd., 3.5 miles west of Holyoke.	2.26	1965-72	3-22-72	17.02	66
01173040	Pleasant Brook near Barre, Mass.	Lat 42°25'44", long 72°04'35", Worcester County, at culvert on State Highway 62, 1.5 miles east of Barre.	1.11	1965-72	3-24-72	6.45	35
01173330	Fish Brook near Gilbertville, Mass.	Lat 42°19'24", long 72°11'11", Worcester County, at culvert on Goddard Rd., 1.2 miles northwest of Gilbertville.	1.01	1964-72	6- 1-72	13.61	37
01173900	Middle Branch Swift River at North New Salem, Mass.	Lat 42°32'45", long 72°19'10", Franklin County, at culvert on Elm St., at North New Salem.	4.73	1964-72	6- 1-72	7.61	108
01175600	Caruth Brook near Paxton, Mass.	Lat 42°19'00", long 71°58'16", Worcester County, at culvert on Spring St., 2.2 miles west of Paxton.	2.35	1964-72	3-17-72	8.73	122
01176450	Roaring Brook near Belchertown, Mass.	Lat 42°14'07", long 72°24'18", Hampshire County, at culvert on State Highway 21, 4 miles south of Belchertown.	2.77	1963-72	6- 1-72	12.02	128
01178230	Mill Brook at Plainfield, Mass.	Lat 42°30'57", long 72°55'30", Hampshire County, at culvert on High St., 0.4 mile west of Plainfield.	4.47	1964-72	6- 1-72	16.46	292
01180100	Fuller Brook near Peru, Mass.	Lat 42°25'59", long 73°01'19", Hampshire County, at culvert on State Highway 143, 1.3 miles southeast of Peru.	2.07	1967-72	5- 3-72	16.87	150
01183100	Seymour Brook tributary at Granville, Mass.	Lat 42°03'53", long 72°51'42", Hampden County, at culvert on State Highway 189 at Granville.	.66	1964-72	6- 1-72	11.92	73
01183810	Longmeadow Brook at Pondsides Rd., near Longmeadow, Mass.	Lat 42°02'22", long 72°35'32", Hampden County, at culvert on Pondsides Rd., 2 miles southwest of Longmeadow.	4.15	1967-72	6-30-72	5.20	121
01184900	Haley Pond Outlet near Otis, Mass.	Lat 42°12'15", long 73°01'56", Berkshire County, at culvert on Algerie Rd., 3 miles northeast of Otis.	.27	1964-72	6- 1-72	11.06	19
Housatonic River basin							
01196990	Windsor Brook tributary at Windsor, Mass.	Lat 42°30'41", long 73°04'37", Berkshire County, at culvert on State Highway 9, 0.9 mile west of Windsor.	0.29	1964-72	6- 1-72	10.99	33
01197050	Churchill Brook at Pittsfield, Mass.	Lat 42°29'28", long 73°16'56", Berkshire County, at culvert on Churchill St., at north limits of Pittsfield.	1.16	1964-72	6- 1-72	11.00	45
01197155	Housatonic River tributary No. 2 at Lee, Mass.	Lat 42°18'21", long 73°13'49", Berkshire County, at culvert on East St., 1.0 mile east of Lee.	.73	1965-72	4-20-72	6.71	53
01197550	Housatonic River tributary at Risingdale, Mass.	Lat 42°13'57", long 73°20'47", Berkshire County, at culvert on State Highway 183, 0.7 mile southeast of Risingdale.	.69	1963-72	4-20-72	16.31	30
Hudson River basin							
01328900	Tanner Brook near Sunderland, Vt.	Lat 43°07'52", long 73°05'45", Bennington County, at culvert on U. S. Highway 7, 1.3 miles north of Sunderland.	2.60	1964-72	3-23-72	11.66	73

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

257

Annual maximum discharge at crest-stage partial-record stations during water year 1972.--Continued

Annual maximum discharge at crest-stage partial-record stations during water year 1972.--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Hudson River basin.--Continued							
01333800	South Stream near Bennington, Vt.	Lat 42°49'53", long 73°10'04", Bennington County, at culvert on South Stream Rd., 3.5 miles southeast of Bennington.	7.70	1963-72	5- 3-72	10.26	96
01333900	Paron Creek near South Shaftsbury, Vt.	Lat 42°58'13", long 73°11'19", Bennington County, at culvert on dirt road, 2 miles northeast of South Shaftsbury.	2.38	1964-72	5- 3-72	9.75	126
St. Lawrence River basin							
04279400	Poultney River tributary at East Poultney, Vt.	Lat 43°32'17", long 73°12'36", Rutland County, at culvert 1.0 mile north of East Poultney.	1.13	1964-72	5- 4-72	11.36	62
04280200	Mettawee River tributary No. 2 at East Rupert, Vt.	Lat 43°16'16", long 73°07'23", Bennington County, at culvert on State Highway 30, at East Rupert.	1.86	1963-72	5- 4-72	13.23	53
04280900	Moan Brook at Rutland, Vt.	Lat 43°36'33", long 72°57'25", Rutland County, at culvert on macadam road, 1.0 mile east of Rutland.	2.12	1964-72	4-20-72	11.05	80
04282200	Nashobe River at Brandon, Vt.	Lat 43°48'37", long 73°04'36", Rutland County, at bridge on dirt road, 1.0 mile northeast of Brandon.	20.1	1968-72	5- 4-72	8.08	735
04282300	Brandy Brook at Bread Loaf, Vt.	Lat 43°57'19", long 72°59'49", Addison County, at culvert on State Highway 125, at Bread Loaf, and 2 miles east of Ripton.	2.24	1963-72	5- 4-72	12.20	128
04282550	Beaver Brook at Cornwall, Vt.	Lat 43°57'29", long 73°12'51", Addison County, at culvert on State Highway 74, at Cornwall.	1.11	1964-72	5- 4-72	10.64	56
04282600	Little Otter Creek tributary near Bristol, Vt.	Lat 44°08'44", long 73°07'05", Addison County, at culvert on dirt road, 2 miles northwest of Bristol.	1.48	1964-72	5- 4-72	11.79	34
04282750	Lewis Creek tributary No. 2 near Rockville, Vt.	Lat 44°15'54", long 73°04'02", Addison County, at culvert on State Highway 116, 1.3 miles north of Rockville.	1.07	1964-72	5- 4-72	11.28	23
04282850	Winooski River tributary No. 2 near Cabot, Vt.	Lat 44°25'53", long 72°18'09", Washington County, at culvert on macadam road, 2 miles north of Cabot.	1.10	1964-72	5- 4-72	11.32	24
04284300	Stevens Branch tributary at South Barre, Vt.	Lat 44°10'51", long 72°31'11", Washington County, at culvert on dirt road, 0.7 mile west of South Barre.	.39	1964-72	5- 4-72	11.32	23
04288400	Bryant Brook at Waterbury Center, Vt.	Lat 44°22'41", long 72°43'29", Washington County, at culvert on State Highway 100, at Waterbury Center.	2.64	1964-72	5- 4-72	11.86	138
04289600	Winooski River tributary near Richmond, Vt.	Lat 44°26'09", long 72°58'46", Chittenden County, at culvert on macadam road, 2 miles north of Richmond.	.71	1964-72	6-15-72	14.59	102
04290700	Bailey Brook at East Hardwick, Vt.	Lat 44°31'41", long 72°18'16", Caledonia County, at culvert on macadam road, 0.5 mile northeast of East Hardwick.	2.52	1964-72	5- 4-72	12.66	135
04292150	Gihan River tributary near Johnson, Vt.	Lat 44°39'36", long 72°37'44", Lamoille County, at culvert on State Highway 100 C, 3 miles northeast of Johnson.	.31	1964-72	5- 4-72	10.44	32
04292200	Lamoille River tributary at Jeffersonville, Vt.	Lat 44°39'13", long 72°49'42", Lamoille County, at culvert on State Highway 108, at Jeffersonville.	.58	1964-72	7-21-72	11.88	48
04293400	Whittaker Brook at Richford, Vt.	Lat 44°59'14", long 72°39'13", Franklin County, at culvert on State Highway 105, 1 mile east of Richford.	.64	1963-72	7-21-72	9.89	69
04293800	Mislaquoit River tributary at Sheldon Junction, Vt.	Lat 44°54'01", long 72°57'35", Franklin County, at culvert on State Highway 105, at Sheldon Junction.	1.69	1963-72	4-20-72	12.90	49
04294200	Saxe Brook near Highgate Springs, Vt.	Lat 44°59'38", long 73°03'59", Franklin County, at culvert on dirt road, 2.5 miles northeast of Highgate Springs.	2.79	1963-72	4-20-72	12.64	68
04295900	Ware Brook near Coventry, Vt.	Lat 44°51'02", long 72°17'33", Orleans County, at culvert on dirt road, 2 miles southwest of Coventry.	2.87	1963-72	5- 4-72	12.88	100
04296150	Lord Brook near Evansville, Vt.	Lat 44°46'59", long 72°07'08", Orleans County, at culvert on State Highway 16, 1.5 miles south of Evansville.	4.76	1964-72	5- 4-72	13.35	258
04296300	Pherrine River tributary near Island Pond, Vt.	Lat 44°50'33", long 71°54'32", Essex County, at culvert on State Highway 114, 2.3 miles northwest of Island Pond.	1.05	1964-72	5- 4-72	12.45	137

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*).

Discharge measurements made at miscellaneous sites during water year 1972						
Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 1 Connecticut River basin						
Beaver Brook	Ashuelot River	Lat 42°56'21", long 72°16'24", Cheshire County, at bridge on cemetery road in Keene, N.H.	-	1971	4-18-72	94
Mountain Brook	do	Lat 42°42'40", long 72°21'23", Franklin County, at culvert on State Highway 78, 2.1 miles north of Warwick, Mass.	-	1971	10- 5-71 4- 5-72 9-12-72 9-27-72	1.4 9.6 *2.8 2.5
Dry Brook	Connecticut River	Lat 42°38'31", long 72°29'53", Franklin County, at culvert on Main Road, 0.1 mile northeast of Gill, Mass.	-	1971	10- 5-71 4- 5-72 9-12-72 9-27-72	1.1 34 *2.4 *2.1
Fourmile Brook	do	Lat 42°37'13", long 72°28'15", Franklin County, at culvert on State Highway 63, at south limits of Northfield, Mass.	-	1971	10- 5-71 4- 5-72 9-12-72 9-27-72	.29 13 *.99 *.79
Couch Brook	Falls River	Lat 42°42'15", long 72°33'54", Franklin County, at culvert on State Highway 3, 1.2 miles south of North Bernardston, Mass.	-	1971	10- 5-71 4- 6-72 9-12-72 9-27-72	.21 8.3 *.28 *.31
Falls River	Connecticut River	Lat 42°41'15", long 72°32'43", Franklin County, at bridge on Burke Falls Road, 1.0 mile northeast of Bernardston, Mass.	-	1971	10- 7-71 4- 6-72 9-12-72 9-27-72	*1.0 89 *2.5 *2.5
Red Brook	Sawmill River	Lat 42°30'15", long 72°26'52", Franklin County, at culvert on Lake View Road, 2.3 miles east of North Leverett, Mass.	-	1971	10- 5-71 4- 5-72 9-13-72 9-27-72	*.29 6.7 *.21 *.30
Long Plain Brook	Connecticut River	Lat 42°27'28", long 72°31'23", Franklin County, at culvert on Central Vermont Railroad, 200 ft west of State Highway 63, 1.2 miles northwest of Leverett, Mass.	-	1971	10- 5-71 4- 6-72 9-12-72 9-28-72	.23 6.7 *.23 *.21
Roaring Brook	do	Lat 42°26'18", long 72°28'59", Franklin County, at culvert on Cushman Road, at East Leverett, Mass.	-	1971	10- 5-71 4-10-72 9-13-72 9-28-72	1.7 19 *1.7 *1.7
Roaring Brook	Mill River	Lat 42°28'19", long 72°40'21", Franklin County, at culvert on Roaring Brook Road, 2.9 miles southeast of Conway, Mass.	-	1971	10- 6-71 4-10-72 9-12-72 9-25-72	*.78 11 *.58 *.78
Hop Brook	Fort River	Lat 42°19'30", long 72°25'46", Hampshire County, 200 feet above diversion, 0.1 mile above State Highway 9, 1.1 miles east of Dwight, Mass., and 1.5 miles northwest of Belchertown, Mass.	-	-	4- 4-72 9-13-72 9-28-72	2.6 *.09 *.14
Scarboro Brook	Hop Brook	Lat 42°20'22", long 72°26'40", Hampshire County, at culvert on Gulf Road, 0.8 mile above State Highway 9, at Dwight, Mass., 4.7 miles northwest of Belchertown.	-	-	10- 8-71 4- 4-72 9-13-72 9-28-72	*.22 6.1 *.46 *.41
Hop Brook tributary	do	Lat 42°19'44", long 72°27'47", Hampshire County, at culvert on Warren Wright Street, 0.7 mile west of Dwight, Mass.	-	1971	10- 8-71 4- 4-72 9-13-72 9-28-72	*.06 4.6 *.10 *.11
Hop Brook	Fort River	Lat 42°20'31", long 72°29'38", Hampshire County, at culvert on Station Road, 0.5 mile east of South Amherst, Mass.	-	1971	10- 8-71 4- 4-72 9-13-72 9-28-72	*3.5 31 *4.6 *4.2
East Branch Mill River tributary	East Branch Mill River	Lat 42°23'59", long 72°43'57", Hampshire County, 100 feet north of Bullard Street, 53 ft above mouth, 0.5 mile north of Williamsburg, Mass.	-	1971	10- 6-71 4- 7-72 9-11-72 9-25-72	*.08 2.1 a*.006 *.02
East Branch Mill River	Mill River	Lat 42°23'58", long 72°43'55", Hampshire County, at bridge on Bullard Street, 0.5 mile north of Williamsburg, Mass.	-	1971	10- 6-71 4- 7-72 9-11-72 9-25-72	*1.9 28 *1.4 *1.5

a Field estimate.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

259

Discharge measurements made at miscellaneous sites during water year 1972.--Continued

Discharge measurements made at miscellaneous sites during water year 1972.--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Connecticut River basin--Continued						
Roberts Meadow Brook	do	Lat 42°20'13", long 72°45'14", Hampshire County, at bridge on North Road, 2.5 miles northeast of Westhampton, Mass.	-	1971	10- 6-71 4- 3-72 9-11-72 9-26-72	*1.2 19 *.90 *.91
Mill River tributary	Mill River	Lat 42°19'16", long 72°39'15", Hampshire County, at culvert on Federal Street, Northampton, Mass., 300 ft above mouth.	-	-	9-14-72 9-28-72	.39 *.28
North Branch Manhan River tributary	Manhan River	Lat 42°15'49", long 72°44'12", Hampshire County, at culvert on Lead Mine Road, 2.4 miles north of Southampton, Mass.	-	1971	10- 6-71 4- 3-72 9-11-72 9-26-72	*.08 3.6 *.03 *.04
Manhan River	Connecticut River	Lat 42°15'59", long 72°41'31", Hampshire County, at bridge on Loudville Road, 1.0 mile west of Easthampton, Mass.	-	1971	10- 7-71 4-11-72 9-14-72 9-29-72	18 154 25 18
Broad Brook	Manhan River	Lat 42°11'36", long 72°40'31", Hampden County, at culvert on Rock Valley Street, 2.8 miles west of Holyoke, Mass.	1.44	1957-58, 1971	10- 6-71 4- 7-72 9-14-72 9-26-72	*.35 4.6 .29 *.22
Bachelor Brook	Connecticut River	Lat 42°16'12", long 72°35'14", Hampshire County, at bridge on State Highway 47, 1.0 mile northwest of South Hadley, Mass., and 1.0 mile above mouth.	31.1	1955†, 1965, 1971	10- 7-71 4- 6-72 9-15-72 9-26-72	*8.4 89 *11 *8.6
Muddy Brook	Stony Brook	Lat 42°13'51", long 72°30'53", Hampshire County, at twin culverts on Truby Street, 1.8 miles south of Granby, Mass.	-	1971	10- 4-71 4-10-72 9-13-72 9-26-72	*.13 5.4 a*.10 *.05
Buttery Brook	Connecticut River	Lat 42°12'54", long 72°35'49", Hampshire County, at culvert on Main St., South Hadley Falls, Mass., 1,000 ft above mouth.	-	-	9-15-72 9-29-72	.13 .15
North Branch Mill River	Mill River	Lat 42°07'02", long 72°28'18", Hampden County, at culvert on Springfield Street, 2.1 miles west of Wilbraham, Mass.	7.61	1957-58, 1971	10- 4-71 4-11-72 9-15-72 9-26-72	*1.7 14 *2.5 *1.8
Mill River	Connecticut River	Lat 42°05'39", long 72°34'03", Hampden County, 75 ft above Hancock Street Bridge, at Springfield, Mass., 0.2 mile below Watershop Pond, and 1.0 mile above mouth.	33.9	1938-51‡	9-15-72 9-29-72	33 20
Pecausic Brook	Connecticut River	Lat 42°03'56", long 72°32'24", Hampden County, at culvert on Dwight Road, at south limits of Springfield, Mass.	-	1971	10- 4-71 4-11-72 9-15-72 9-26-72	*1.8 5.3 *2.2 *1.6
Still Brook	Muddy Brook	Lat 42°02'31", long 72°41'00", at bridge on State Highway 187, 3 miles southwest of West Agawam, Mass.	5.33	1957-58, 1962-65, 1971	10- 4-71 4- 7-72 9-14-72 9-26-72	*.82 15 1.5 *1.5

† Peak flow.

‡ Operated as a continuous-record gaging station.

a Field estimate.

PART 2. WATER QUALITY RECORDS

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WATER QUALITY RECORDS

263

MERRIMACK RIVER BASIN

01094700 NORTH NASHUA RIVER AT NORTH VILLAGE, MASS.

LOCATION.--Lat 42°28'47", long 71°41'04". Worcester County, multiple-parameter monitor on right bank 600 ft downstream from bridge at Ponakin Mill, 0.6 mile upstream from Ponakin Brook, 0.9 mile northwest of North Village, and 5 miles downstream from gaging station near North Leominster.

DRAINAGE AREA.--124 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

Water temperatures: October 1968 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, 752 micromhos Feb. 4; minimum, 80 micromhos Apr. 20, 21.

pH: Maximum, 7.2 Oct. 5; minimum, 4.8 Aug. 28.

Dissolved oxygen: Maximum, 14.7 mg/l Mar. 20; minimum, 2.4 mg/l July 8.

Water temperatures: Maximum, 27.5°C Aug. 26; minimum, freezing point several days during winter period.

Period of record:

Specific conductance: Maximum, 857 micromhos Jan. 29, 1970; minimum, 70 micromhos Apr. 23, 1969.

pH: Maximum, 7.9 Sept. 13, 14, 1969; minimum, 4.8 Aug. 28, 1972.

Dissolved oxygen: Maximum, 14.8 mg/l Mar. 6, 1971; minimum, 0.0 mg/l July 26, 30, 1970, June 22, 1971.

Water temperatures: Maximum, 30.0°C July 29, 1970; minimum, freezing point several days during winter periods.

REMARKS.--Figures of daily discharge, computed on basis of records for gaging station near Leominster, are available at district office. Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	336	290	315	293	266	280	---	---	---	206	168	183
2	342	302	322	274	231	252	---	---	---	239	158	171
3	315	298	306	---	---	---	---	---	---	528	222	330
4	304	260	277	---	---	---	---	---	---	281	194	221
5	282	238	263	---	---	---	---	---	---	274	204	236
6	288	245	276	---	---	---	---	---	---	273	216	239
7	316	252	283	---	---	---	---	---	---	255	214	228
8	284	244	260	---	---	---	---	---	---	268	212	231
9	334	271	304	---	---	---	234	209	216	---	---	---
10	315	100	240	294	256	270	238	214	222	225	208	217
11	199	101	160	310	268	282	226	178	201	214	181	193
12	211	161	189	305	261	283	190	153	168	199	179	188
13	249	203	220	300	270	281	167	157	160	207	176	185
14	268	239	247	300	265	281	164	157	160	202	151	168
15	281	245	256	283	254	268	324	169	272	167	152	157
16	289	247	268	363	242	297	267	168	203	---	---	---
17	269	240	254	343	291	314	---	---	---	---	---	---
18	256	235	246	324	288	305	---	---	---	---	---	---
19	245	220	231	325	297	309	---	---	---	233	192	208
20	275	240	267	330	286	304	---	---	---	224	198	210
21	289	261	275	318	264	286	388	212	268	317	195	239
22	314	266	286	547	256	354	623	250	373	418	209	295
23	297	272	283	513	280	411	263	225	242	244	212	227
24	306	269	290	278	248	262	265	216	242	240	216	224
25	284	165	240	282	241	250	220	141	154	233	206	219
26	233	165	192	297	204	239	208	145	161	---	---	---
27	288	209	237	269	215	254	207	153	169	---	---	---
28	286	247	265	341	244	286	231	199	213	---	---	---
29	282	262	272	304	227	287	223	176	187	---	---	---
30	296	268	282	---	---	---	204	174	187	---	---	---
31	290	264	278	---	---	---	231	188	197	---	---	---
MONTH	342	100	261	---	---	---	---	---	---	---	---	---

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HERRINACK RIVER BASIN

01094700 NORTH NASHUA RIVER AT NORTH VILLAGE, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	432	323	381	---	---	---	171	136	147
2	---	---	---	461	245	333	---	---	---	167	149	157
3	310	254	271	268	209	225	---	---	---	161	124	147
4	752	249	470	216	165	199	---	---	---	119	102	109
5	361	256	291	197	176	191	---	---	---	140	105	114
6	266	249	258	191	170	181	---	---	---	150	116	126
7	260	204	232	185	170	176	---	---	---	142	125	132
8	---	---	---	273	176	224	---	---	---	160	129	137
9	---	---	---	203	173	184	---	---	---	147	117	126
10	---	---	---	214	178	190	---	---	---	---	---	---
11	400	248	309	237	187	196	---	---	---	---	---	---
12	338	250	293	241	173	192	164	143	151	---	---	---
13	---	---	---	195	101	137	169	119	137	---	---	---
14	280	205	234	206	174	186	124	108	115	---	---	---
15	229	184	204	245	187	206	136	106	114	---	---	---
16	204	174	182	443	201	252	125	114	119	---	---	---
17	187	170	183	467	162	290	115	90	106	---	---	---
18	191	187	189	159	117	134	107	82	92	---	---	---
19	194	190	192	135	116	126	104	94	98	---	---	---
20	198	177	190	158	128	140	97	80	92	---	---	---
21	189	178	184	170	159	164	105	80	92	---	---	---
22	215	185	195	---	---	---	104	96	100	---	---	---
23	252	212	228	---	---	---	102	89	95	---	---	---
24	254	213	226	---	---	---	114	90	100	---	---	---
25	295	226	263	---	---	---	130	101	112	---	---	---
26	302	210	245	---	---	---	136	113	122	---	---	---
27	217	197	207	---	---	---	149	120	129	---	---	---
28	212	196	204	---	---	---	168	129	139	---	---	---
29	368	203	212	---	---	---	177	137	168	---	---	---
30	---	---	---	---	---	---	152	134	142	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	752	170	237	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	138	120	128	---	---	---	271	256	264
2	122	105	114	151	133	138	---	---	---	274	256	264
3	146	115	123	151	124	135	---	---	---	263	163	224
4	133	121	125	137	124	132	---	---	---	69	136	150
5	139	113	120	144	129	134	---	---	---	198	169	185
6	163	126	145	158	139	145	---	---	---	223	196	207
7	161	131	141	184	157	166	---	---	---	277	223	243
8	161	145	149	200	134	182	---	---	---	278	263	270
9	174	126	146	153	90	125	---	---	---	274	260	268
10	145	93	111	172	153	161	---	---	---	254	228	239
11	171	145	156	---	---	---	---	---	---	271	240	258
12	219	167	188	---	---	---	---	---	---	271	226	245
13	267	221	245	---	---	---	---	---	---	253	232	241
14	235	145	182	---	---	---	---	---	---	259	227	248
15	182	158	168	---	---	---	186	167	177	221	203	212
16	194	160	171	---	---	---	230	190	215	245	209	228
17	182	165	171	---	---	---	257	228	243	251	241	246
18	181	162	167	---	---	---	250	238	242	261	246	256
19	168	148	156	---	---	---	250	232	240	257	208	228
20	188	160	175	---	---	---	235	221	230	226	192	208
21	202	174	184	---	---	---	237	226	232	256	208	224
22	211	100	178	---	---	---	242	217	226	282	238	252
23	161	117	129	---	---	---	252	227	239	296	240	263
24	147	122	136	---	---	---	262	250	257	286	257	268
25	163	148	153	---	---	---	263	241	253	256	220	239
26	154	119	136	---	---	---	260	214	239	246	223	233
27	160	137	146	---	---	---	268	239	254	269	252	260
28	165	146	155	---	---	---	236	141	193	297	252	270
29	193	163	178	---	---	---	215	158	192	286	261	277
30	208	114	166	---	---	---	240	219	231	286	25	276
31	---	---	---	---	---	---	255	241	247	---	---	---
MONTH	267	93	156	---	---	---	---	---	---	297	136	242
YEAR	752	80	212									

01094700 NORTH NASHUA RIVER AT NORTH VILLAGE, MASS.--Continued

PH UNITS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.9	6.6	6.7	7.0	6.7	6.8	---	---	---	6.9	6.7	6.8
2	7.1	6.7	6.8	6.9	6.6	6.8	---	---	---	6.8	6.8	6.8
3	5.9	6.6	6.8	---	---	---	---	---	---	6.8	6.7	6.8
4	6.9	6.6	6.7	---	---	---	---	---	---	6.8	6.6	6.7
5	7.2	6.6	6.9	---	---	---	---	---	---	6.6	6.3	6.6
6	6.9	6.5	6.7	---	---	---	---	---	---	6.9	6.6	6.7
7	6.8	6.3	6.5	---	---	---	---	---	---	6.8	6.7	6.7
8	6.3	6.3	6.5	---	---	---	---	---	---	6.9	6.7	6.8
9	7.0	6.4	6.7	---	---	---	6.6	6.5	6.6	---	---	---
10	6.9	6.4	6.8	6.8	6.4	6.6	6.7	6.5	6.6	6.8	6.7	6.7
11	6.8	6.4	6.7	6.7	6.5	6.6	6.6	6.3	6.4	6.8	6.7	6.7
12	7.0	6.5	6.7	6.6	6.4	6.5	6.4	6.3	6.3	6.8	6.6	6.7
13	7.1	6.5	6.7	6.5	6.3	6.4	6.5	6.4	6.4	6.8	6.6	6.7
14	7.0	6.5	6.7	6.7	6.5	6.5	6.5	6.3	6.4	6.7	6.5	6.6
15	6.7	6.3	6.5	6.7	6.5	6.6	6.7	6.3	6.4	6.7	6.6	6.7
16	6.5	6.2	6.3	6.8	6.6	6.7	6.8	6.5	6.6	6.9	6.7	6.8
17	6.5	6.1	6.3	6.9	6.6	6.8	---	---	---	---	---	---
18	6.8	6.1	6.5	6.9	6.6	6.7	---	---	---	---	---	---
19	6.9	6.5	6.7	6.9	6.7	6.8	---	---	---	6.7	6.5	6.6
20	6.9	6.5	6.7	6.8	6.7	6.7	---	---	---	6.8	6.6	6.7
21	6.9	6.5	6.7	6.8	6.7	6.7	6.8	6.3	6.5	6.8	6.6	6.7
22	6.9	6.5	6.6	6.9	6.7	6.8	6.5	6.4	6.4	6.9	6.7	6.8
23	6.8	6.5	6.6	6.8	6.7	6.8	6.6	6.4	6.5	6.8	6.6	6.7
24	6.7	6.5	6.6	6.8	6.7	6.8	6.5	6.3	6.4	6.9	6.6	6.7
25	6.6	6.5	6.6	6.9	6.6	6.8	6.5	6.4	6.5	6.7	6.6	6.7
26	6.8	6.6	6.6	7.1	6.7	6.9	6.6	6.6	6.6	---	---	---
27	6.7	6.5	6.6	6.8	6.7	6.8	6.7	6.6	6.6	---	---	---
28	6.8	6.5	6.6	6.8	6.6	6.7	6.8	6.6	6.7	---	---	---
29	6.9	6.5	6.6	6.7	6.4	6.6	6.7	6.5	6.7	---	---	---
30	6.9	6.6	6.7	---	---	---	6.9	6.6	6.7	---	---	---
31	6.9	6.7	6.8	---	---	---	6.9	6.6	6.7	---	---	---
MONTH	7.2	6.1	6.6	---	---	---	---	---	---	---	---	---
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.9	6.6	6.7	---	---	---	6.6	6.5	6.6
2	---	---	---	6.7	6.5	6.6	---	---	---	6.7	6.4	6.6
3	6.9	6.7	6.8	6.6	6.4	6.5	---	---	---	6.7	6.6	6.6
4	6.9	6.6	6.7	6.6	6.4	6.5	---	---	---	6.6	6.5	6.5
5	6.7	6.6	6.6	6.5	6.4	6.5	---	---	---	6.6	6.5	6.5
6	6.8	6.6	6.7	6.6	6.5	6.5	---	---	---	6.6	6.4	6.5
7	6.7	6.5	6.6	6.6	6.5	6.5	---	---	---	6.6	6.4	6.5
8	---	---	---	6.8	6.5	6.6	---	---	---	6.5	6.3	6.5
9	---	---	---	6.8	6.6	6.7	---	---	---	6.6	6.4	6.4
10	---	---	---	6.7	6.6	6.6	---	---	---	6.4	6.3	6.4
11	6.9	6.6	6.8	6.7	6.5	6.6	---	---	---	---	---	---
12	6.9	6.7	6.8	6.7	6.6	6.6	6.6	6.5	6.6	---	---	---
13	7.0	6.8	6.8	6.6	6.5	6.6	6.6	6.4	6.5	---	---	---
14	6.9	6.7	6.7	6.6	6.5	6.6	6.5	6.4	6.5	---	---	---
15	6.8	6.5	6.7	6.8	6.5	6.7	6.5	6.3	6.4	---	---	---
16	7.0	6.6	6.8	6.7	6.5	6.6	6.5	6.3	6.4	---	---	---
17	7.0	6.8	6.9	6.6	6.4	6.5	6.5	6.4	6.4	---	---	---
18	7.0	6.7	6.8	6.4	6.0	6.3	6.6	6.4	6.4	---	---	---
19	6.8	6.7	6.8	6.4	6.3	6.4	6.5	6.2	6.4	---	---	---
20	7.0	6.7	6.8	6.5	6.4	6.5	6.4	6.2	6.3	---	---	---
21	6.8	6.7	6.7	6.5	6.4	6.4	6.3	6.2	6.3	---	---	---
22	6.9	6.8	6.8	6.8	6.4	6.5	6.5	6.2	6.3	---	---	---
23	7.0	6.7	6.8	---	---	---	6.3	6.2	6.3	---	---	---
24	6.9	6.7	6.8	---	---	---	6.6	6.2	6.4	---	---	---
25	6.7	6.6	6.7	---	---	---	6.5	6.4	6.5	6.7	6.4	6.6
26	6.8	6.8	6.7	---	---	---	6.5	6.4	6.5	6.7	6.4	6.8
27	6.9	6.7	6.7	---	---	---	6.5	6.4	6.5	6.5	6.3	6.4
28	6.8	6.7	6.8	---	---	---	6.5	6.5	6.5	6.5	6.3	6.5
29	6.8	6.7	6.7	---	---	---	6.7	6.4	6.5	6.6	6.4	6.5
30	---	---	---	---	---	---	6.6	6.4	6.5	6.7	6.4	6.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	7.0	6.5	6.8	---	---	---	---	---	---	---	---	---

PH UNITS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.5	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.7	6.3	6.6
2	6.5	6.3	6.4	6.4	6.1	6.2	6.4	6.2	6.3	6.6	6.2	6.4
3	6.4	6.2	6.4	6.3	6.2	6.3	6.4	6.2	6.3	6.2	5.4	5.8
4	6.4	6.1	6.3	6.4	6.2	6.3	6.4	6.2	6.3	6.6	5.3	6.3
5	6.5	6.2	6.4	6.8	6.3	6.6	6.4	6.2	6.3	6.8	6.4	6.5
6	6.5	6.4	6.5	6.8	6.6	6.7	6.4	6.2	6.3	6.7	6.3	6.5
7	6.5	6.4	6.5	6.9	6.5	6.7	6.4	6.2	6.3	6.7	6.3	6.4
8	6.5	6.4	6.5	6.9	6.3	6.7	6.4	6.2	6.3	6.7	6.3	6.5
9	6.6	6.4	6.5	6.7	6.3	6.5	6.4	6.2	6.3	6.7	6.4	6.5
10	6.4	6.2	6.3	6.8	6.5	6.6	6.4	6.2	6.3	6.9	6.5	6.6
11	6.6	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	7.1	6.5	6.7
12	6.6	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
13	6.5	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
14	6.5	6.2	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
15	6.5	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
16	6.5	6.4	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
17	6.5	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
18	6.5	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
19	6.5	6.3	6.5	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
20	6.7	6.3	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
21	6.6	6.2	6.5	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
22	6.8	6.5	6.6	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
23	6.9	6.5	6.7	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
24	6.7	6.3	6.5	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
25	6.6	6.3	6.5	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
26	6.7	6.4	6.6	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
27	6.7	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
28	6.3	6.0	6.2	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
29	6.3	6.1	6.2	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
30	6.3	6.0	6.2	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
31	6.4	6.1	6.3	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
MONTH	6.9	6.0	6.4	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3
YEAR	7.2	4.8	6.6	6.4	6.2	6.3	6.4	6.2	6.3	6.4	6.2	6.3

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	10.9	9.9	10.5	---	---	---	9.6	8.3	9.1
2	---	---	---	12.6	10.7	12.0	---	---	---	8.9	7.9	8.2
3	12.1	10.6	11.5	13.8	11.8	12.7	---	---	---	8.7	8.1	8.5
4	12.7	10.9	12.0	14.4	11.8	13.9	---	---	---	9.5	8.4	9.1
5	13.7	12.9	13.4	14.1	13.5	13.9	---	---	---	9.3	8.7	9.1
6	13.8	13.2	13.5	14.2	12.9	13.7	---	---	---	9.5	8.0	8.9
7	13.3	12.6	12.9	13.5	12.3	13.2	---	---	---	8.6	7.8	8.3
8	---	---	---	---	---	---	---	---	---	9.0	8.0	8.5
9	---	---	---	---	---	---	---	---	---	9.3	8.2	8.9
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	10.9	9.8	10.3	---	---	---
13	---	---	---	---	---	---	11.5	10.4	11.2	---	---	---
14	12.7	12.0	12.3	---	---	---	11.8	11.3	11.5	---	---	---
15	12.7	12.1	12.4	13.6	12.3	13.2	11.8	11.4	11.6	---	---	---
16	13.4	12.6	13.0	12.6	10.8	12.1	11.5	10.4	11.0	---	---	---
17	13.7	11.6	13.0	12.1	10.5	11.2	11.5	10.7	11.1	---	---	---
18	13.2	11.5	12.4	14.0	8.8	11.3	12.2	10.7	11.7	---	---	---
19	12.4	12.0	12.2	14.2	11.8	13.0	---	---	---	---	---	---
20	---	---	---	14.7	12.8	13.8	---	---	---	---	---	---
21	---	---	---	13.6	11.3	12.7	---	---	---	---	---	---
22	---	---	---	13.4	11.3	12.2	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	12.6	11.9	12.4	---	---	---	11.1	10.6	10.8	---	---	---
25	12.9	11.9	12.3	---	---	---	11.6	10.2	11.0	7.8	6.4	6.9
26	13.0	11.8	12.3	---	---	---	11.6	9.9	10.8	8.0	6.1	7.1
27	12.9	11.2	12.1	---	---	---	11.2	10.3	10.7	7.3	5.6	6.5
28	11.5	10.1	11.0	---	---	---	10.9	9.3	10.1	6.8	5.6	6.2
29	10.5	9.0	10.1	---	---	---	10.3	8.9	9.6	7.1	5.5	6.3
30	---	---	---	---	---	---	10.4	8.5	9.5	7.3	5.7	6.4
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.8	5.8	7.2	---	---	---	6.1	3.2	4.3
2	7.9	7.0	7.4	7.5	5.7	6.8	---	---	---	5.9	3.2	4.2
3	7.9	6.3	7.2	7.4	5.8	6.6	---	---	---	4.8	3.3	4.1
4	7.4	6.5	6.9	7.6	6.1	6.7	---	---	---	6.0	3.7	5.3
5	7.6	6.0	7.0	7.9	6.3	7.2	---	---	---	6.6	4.5	5.5
6	---	---	---	7.6	6.3	7.0	---	---	---	6.3	4.0	5.1
7	7.4	6.6	7.0	8.9	5.7	6.4	---	---	---	6.1	3.7	4.6
8	7.7	6.7	7.2	6.3	2.4	5.6	---	---	---	6.2	3.3	4.6
9	7.3	6.2	6.7	7.0	4.6	6.4	---	---	---	5.4	3.2	4.1
10	6.3	6.1	7.5	7.1	5.3	6.1	---	---	---	6.7	3.6	4.9
11	9.2	6.6	8.2	---	---	---	---	---	---	7.1	4.0	4.1
12	7.3	4.9	6.6	---	---	---	---	---	---	6.7	3.9	5.1
13	9.6	3.6	9.0	---	---	---	---	---	---	6.6	3.8	4.8
14	6.6	3.9	9.2	---	---	---	---	---	---	5.7	4.1	4.6
15	6.5	9.3	8.0	---	---	---	5.6	4.3	9.0	6.4	4.2	5.1
16	6.6	5.3	5.9	---	---	---	7.0	4.5	9.6	6.7	4.2	5.1
17	6.6	5.1	6.0	---	---	---	6.2	4.3	9.0	6.7	3.5	4.9
18	7.1	5.7	6.4	---	---	---	8.0	4.3	9.0	6.4	3.1	4.2
19	7.4	6.2	6.8	---	---	---	9.1	4.1	4.9	4.3	3.0	3.0
20	6.6	9.2	6.0	---	---	---	8.9	4.0	4.9	6.6	4.1	5.1
21	6.3	9.0	5.5	---	---	---	6.9	4.0	9.1	7.0	4.7	5.6
22	6.0	8.9	5.2	---	---	---	6.6	3.9	4.9	6.4	3.8	4.9
23	6.9	4.6	6.1	---	---	---	6.9	3.6	4.8	5.9	3.9	5.1
24	7.3	6.2	6.7	---	---	---	6.3	3.2	4.4	6.8	3.8	5.0
25	7.3	6.2	6.8	---	---	---	6.4	3.1	4.2	6.9	3.7	4.9
26	7.6	6.2	7.0	---	---	---	5.6	2.6	3.9	5.4	3.1	4.3
27	7.3	5.7	6.6	---	---	---	4.8	2.6	3.6	6.2	3.0	3.9
28	6.7	5.1	6.6	---	---	---	9.2	3.9	4.2	6.8	3.0	4.2
29	6.4	4.7	6.6	---	---	---	6.4	3.9	4.2	6.4	3.9	6.9
30	6.7	3.9	6.4	---	---	---	5.9	3.3	6.9	---	4.0	6.4
31	---	---	---	---	---	---	6.1	3.3	4.9	---	---	---
MONTH	6.2	6.6	6.6	---	---	---	---	---	---	7.0	3.0	4.7
MEAN	12.7	2.4	8.3	---	---	---	---	---	---	---	---	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	17.5	18.5	16.5	14.0	15.5	---	---	---	1.0	0.0	0.5
2	20.5	17.5	19.0	17.5	16.0	16.5	---	---	---	2.5	1.0	1.5
3	20.5	16.5	19.5	---	---	---	---	---	---	2.5	1.5	2.0
4	16.5	14.5	15.5	---	---	---	---	---	---	4.0	2.0	2.5
5	19.0	16.0	17.5	---	---	---	---	---	---	5.0	3.0	4.0
6	18.5	17.5	18.0	---	---	---	---	---	---	3.0	0.5	1.5
7	16.5	15.0	17.0	---	---	---	---	---	---	3.0	1.5	2.0
8	15.5	13.0	14.5	---	---	---	---	---	---	3.0	0.0	1.5
9	14.5	12.5	13.5	---	---	---	6.5	5.5	6.0	---	---	---
10	15.5	14.5	15.0	7.5	6.5	7.5	7.5	6.5	7.0	---	---	---
11	15.5	14.5	15.0	8.0	6.5	7.5	7.5	5.0	6.5	5.5	2.5	3.5
12	15.5	14.0	15.0	9.0	6.5	8.0	4.5	3.0	4.0	5.0	4.0	4.5
13	15.5	11.5	13.5	9.5	8.5	9.0	4.5	4.0	4.0	7.0	3.5	4.5
14	17.5	14.0	16.0	8.0	5.5	6.5	6.0	3.5	4.5	7.0	3.0	5.5
15	18.5	16.0	17.5	5.5	4.5	5.0	6.0	5.0	5.5	3.0	2.0	2.5
16	18.0	16.0	17.5	8.0	5.5	7.0	7.5	5.5	6.5	---	---	---
17	17.5	14.5	16.5	8.5	5.5	7.0	6.0	4.5	5.0	---	---	---
18	14.5	12.5	14.0	9.5	8.0	8.5	5.0	2.0	4.0	---	---	---
19	14.0	11.5	13.0	11.0	7.5	9.0	1.5	0.5	1.0	5.0	4.5	5.0
20	15.5	13.5	14.5	11.5	10.0	11.0	3.0	1.0	1.5	5.0	3.0	3.5
21	15.0	13.0	14.5	9.5	6.0	7.5	5.5	3.0	4.0	5.0	3.5	4.0
22	16.0	13.5	15.0	6.0	5.0	5.5	5.0	1.0	3.0	3.5	3.0	3.5
23	17.0	15.0	16.0	5.0	3.5	4.5	2.0	0.5	1.0	5.5	3.5	4.5
24	16.0	14.0	15.0	5.0	2.5	4.0	5.5	2.0	4.0	5.0	4.5	5.0
25	15.5	14.0	14.5	5.0	0.5	2.0	4.5	0.5	1.5	5.5	3.0	5.0
26	17.0	14.0	15.5	3.0	1.5	2.0	4.0	1.0	2.0	---	---	---
27	18.5	16.0	17.0	5.0	2.5	3.5	4.0	3.0	3.5	---	---	---
28	20.0	17.5	18.5	5.5	4.0	5.0	6.0	4.0	5.5	---	---	---
29	18.5	16.0	17.5	5.5	4.5	4.5	5.5	3.5	4.0	---	---	---
30	17.0	14.5	15.5	---	---	---	4.5	1.0	2.5	---	---	---
31	15.5	14.0	14.5	---	---	---	2.0	1.0	1.5	---	---	---
MONTH	20.5	11.5	16.0	---	---	---	---	---	---	---	---	---
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.0	4.0	6.0	---	---	---	14.5	11.5	13.5
2	---	---	---	6.5	3.5	4.5	---	---	---	14.5	11.5	13.0
3	2.5	0.5	1.5	4.0	1.5	3.0	---	---	---	11.5	10.0	10.5
4	3.0	1.5	2.5	3.0	1.0	2.0	---	---	---	10.5	9.5	10.0
5	1.5	0.5	0.5	2.5	0.5	1.5	---	---	---	11.5	9.5	10.5
6	1.0	0.5	0.5	2.0	0.5	1.0	---	---	---	14.5	9.5	

MERRIMACK RIVER BASIN

01096550 MERRIMACK RIVER ABOVE LOWELL, MASS.

LOCATION. --Lat 42°38'20", long 71°22'17", Middlesex County, on left bank at intake of Lowell water treatment plant, 2.7 miles upstream from Pawtucket Dam, and 6 miles downstream from Massachusetts-New Hampshire State line.

PERIOD OF RECORD. --Chemical analyses: August 1969 to September 1972.

REMARKS. --Additional chemical analyses for this station in radiochemical and pesticide tables and in table of composited samples. Discharge computed on basis of records for gaging station below Concord River (sta. 01100000) and gaging station on Concord River (sta. 01099500).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT.								
04...	1200	2000	125	6.4	7.1	18.5	25.7	15000
NOV.								
01...	1200	2800	109	5.3	6.5	15.0	17.0	25300
DEC.								
06...	1100	3450	130	7.5	6.8	1.0	-5.0	36000
JAN.								
03...	0900	4750	106	14.0	6.7	.7	2.6	5400
FEB.								
07...	1200	5350	132	14.0	6.7	.0	--	20000
MAR.								
06...	1400	9480	112	14.0	6.6	.0	.0	6800
APR.								
03...	0900	17300	84	13.3	6.5	3.5	7.7	22000
MAY								
02...	0900	20900	59	11.4	6.6	9.9	10.3	18000
JUNE								
12...	1400	9630	85	8.4	6.6	18.0	26.0	91000
JULY								
11...	1330	5500	94	7.9	7.0	22.5	31.0	44000
AUG.								
07...	1000	5070	108	6.0	6.8	22.5	22.0	56000
SEP.								
11...	1100	2400	131	6.2	7.4	20.0	23.5	120000

DATE	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METH- YLENE BLUE ACTIVE SUB- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYL A (UG/L)	TUR- BID- ITY (JTU)
OCT.								
04...	350	.40	2.5	.19	.06	21	15	3
NOV.								
01...	300	.30	1.5	.17	.05	14	2.4	3
DEC.								
06...	870	.31	1.2	.19	.06	15	2.9	13
JAN.								
03...	1300	.20	.90	.098	.05	15	.3	8
FEB.								
07...	1500	.30	1.2	.11	.05	16	3.0	4
MAR.								
06...	310	.30	.70	.10	.03	11	9.0	10
APR.								
03...	47	.20	.92	.050	.03	12	1.2	3
MAY								
02...	1300	.09	.39	.055	.02	11	1.5	7
JUNE								
12...	600	.60	1.0	.089	.04	11	2.6	5
JULY								
11...	990	1.4	1.0	.11	.04	16	4.6	3
AUG.								
07...	7600	.50	1.5	.12	.04	13	1.2	4
SEP.								
11...	330	.40	2.2	.19	.05	14	2.0	4

HERRIMACK RIVER BASIN

271

01096550 HERRIMACK RIVER ABOVE LOWELL, MASS.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MANG- NESE (MN) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)
SEP. 11...	320	60	7.0	1.1	12	1.5	10	7	<.5

DATE	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED FLUOR- IDE (F) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (NH) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINIT- Y AS CaCO3 (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)
SEP. 11...	25	12	17	.3	.026	1.8	1.6	21	0

DATE	HARD- NESS (CA.MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	NON- CHEM- ICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 C) (MG/L)	DIS- SOLVED SOLIDS (SJM OF CONSTI- TUENTS) (MG/L)	COLOR (PLAT- INUM- CORALY UNITS)
SEP. 11...	22	2	3.4	.02	10	9	72	67	25

MERRIMACK RIVER BASIN

01096570 MERRIMACK RIVER ABOVE CONCORD RIVER, AT LOWELL, MASS.

LOCATION.--Lat 42°38'57" long 71°19'50", Middlesex County, at Mammoth Road Bridge, two-parameter monitor in gatehouse at Pawtucket Dam, 0.8 mile upstream from Beaver Brook, 1.8 miles upstream from Concord River, and 2 miles upstream from gaging station below Concord River.

DRAINAGE AREA.--Total above gage, 4,131 sq mi; net above gage, 4,014 sq mi (diversions as needed from 117 sq mi for use of Boston metropolitan district and city of Worcester).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972 (discontinued).

Water temperatures: October 1967 to September 1972 (discontinued).

EXTREMES.--1971-72:

Specific conductance: Maximum, 191 micromhos Feb. 6; minimum, 56 micromhos Apr. 21-23, May 6.

Water temperatures: Maximum observed, 27.0°C July 20, 21, 22, 23; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance: Maximum, 254 micromhos Aug. 2, 1970; minimum, 34 micromhos Apr. 22, 1969.

Water temperatures: Maximum, 31.5°C July 29, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Figures of daily discharge, computed on basis of records for gaging station below Concord River (sta 01100000) and gaging station on Concord River (sta 01099500) are available at district office. Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	140	121	132	118	114	116	132	119	125	117	104	110
2	140	136	139	115	109	112	135	130	132	117	102	109
3	141	133	138	109	104	107	144	130	138	111	100	105
4	134	126	130	117	108	114	130	127	129	125	107	113
5	143	125	136	130	115	122	133	125	130	133	116	125
6	146	132	137	132	122	128	130	121	124	125	111	116
7	137	132	134	122	117	120	122	119	121	124	115	119
8	143	134	138	129	120	125	120	115	117	143	119	126
9	154	147	150	124	111	116	138	117	129	133	119	125
10	153	148	151	112	100	103	153	132	140	136	120	124
11	164	152	157	118	104	111	147	120	130	128	120	123
12	152	116	143	127	119	125	128	120	123	148	123	135
13	113	102	108	129	123	126	124	111	118	147	123	131
14	120	106	111	129	121	124	128	109	119	138	120	128
15	122	112	117	122	118	120	122	105	116	126	117	122
16	115	107	110	119	116	118	115	103	109	120	113	117
17	115	106	110	115	111	113	119	104	110	114	107	112
18	110	104	107	120	110	114	127	113	120	112	104	108
19	106	100	103	133	121	126	125	112	117	109	103	106
20	108	100	103	138	132	136	123	112	117	104	100	101
21	118	108	113	139	135	137	121	106	111	106	99	103
22	119	117	118	143	139	141	116	108	111	113	102	107
23	120	117	119	140	126	133	118	108	113	114	104	108
24	120	117	119	128	116	122	118	111	115	113	108	109
25	118	115	117	132	118	124	115	110	112	126	106	113
26	118	107	113	151	136	143	116	104	110	130	119	124
27	108	103	106	142	132	137	117	112	115	125	116	120
28	121	109	112	135	128	132	117	112	114	122	114	118
29	120	116	118	128	120	122	132	110	117	120	110	114
30	119	115	117	129	119	124	129	109	119	111	106	108
31	117	112	115	---	---	---	112	100	106	110	106	108
MONTH	164	100	123	151	100	123	153	100	120	148	99	116

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	110	102	105	135	112	124	87	84	85	66	64	65
2	114	110	112	136	123	128	89	84	87	64	62	63
3	114	108	111	140	123	132	85	80	83	63	58	61
4	132	116	122	156	129	142	82	77	80	60	57	59
5	166	131	147	148	122	132	80	77	79	59	57	58
6	191	154	173	120	107	111	83	78	80	68	56	57
7	170	127	144	116	107	111	---	---	---	---	---	---
8	140	126	133	116	110	114	---	---	---	---	---	---
9	140	131	136	132	114	120	---	---	---	60	57	58
10	143	129	133	129	116	121	---	---	---	63	59	61
11	131	117	123	124	119	122	---	---	---	67	62	64
12	130	120	126	123	115	119	---	---	---	67	65	66
13	130	120	124	124	114	118	---	---	---	70	66	68
14	136	119	126	121	115	118	82	79	80	72	69	70
15	150	120	133	122	114	118	83	75	79	73	71	72
16	128	120	124	122	111	117	78	73	74	74	70	72
17	127	104	114	133	117	124	77	73	75	70	66	68
18	104	94	102	136	116	126	73	67	71	68	64	65
19	99	93	96	116	102	109	67	62	64	67	65	65
20	96	92	93	99	83	89	62	59	60	89	67	70
21	99	91	94	83	78	82	60	56	58	72	68	70
22	100	96	99	81	77	79	57	56	56	72	70	71
23	106	98	101	95	81	82	57	56	56	73	71	72
24	106	97	102	84	72	76	59	57	57	74	72	73
25	111	99	105	73	70	71	60	58	59	---	---	---
26	119	110	114	73	70	72	63	59	59	---	---	---
27	113	105	109	75	72	73	62	59	60	---	---	---
28	117	105	111	77	73	75	62	59	60	---	---	---
29	126	100	115	81	76	78	64	62	63	---	---	---
30	---	---	---	83	81	82	67	63	65	---	---	---
31	---	---	---	94	83	84	---	---	---	---	---	---
MONTH	191	91	119	156	70	105	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	91	85	88	102	98	100
2	---	---	---	---	---	---	93	89	90	103	96	100
3	---	---	---	---	---	---	102	92	96	113	96	102
4	---	---	---	---	---	---	119	99	106	120	108	112
5	---	---	---	---	---	---	121	109	114	120	102	111
6	---	---	---	---	---	---	122	104	114	120	100	108
7	---	---	---	---	---	---	118	105	111	123	109	117
8	---	---	---	---	---	---	109	103	106	123	108	116
9	---	---	---	---	---	---	134	110	120	136	122	126

MERRIMACK RIVER BASIN

01096570 MERRIMACK RIVER ABOVE CONCORD RIVER, AT LOWELL, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	19.0	19.5	16.0	15.5	16.0	3.0	2.0	3.0	0.5	0.5	0.5
2	20.5	19.0	20.0	16.0	15.5	15.5	2.0	1.5	2.0	1.0	0.5	0.5
3	20.5	19.0	20.0	15.5	15.0	15.0	1.5	1.0	1.0	0.5	0.0	0.5
4	19.5	18.5	19.0	14.5	14.0	14.5	1.0	0.5	1.0	0.5	0.0	0.0
5	20.0	18.5	19.0	14.0	13.5	13.5	1.0	0.5	0.5	0.5	0.0	0.0
6	19.5	18.5	19.0	13.5	13.0	13.0	1.0	0.5	0.5	0.5	0.0	0.5
7	18.5	18.0	18.0	13.0	11.5	12.5	1.0	0.5	0.5	0.5	0.0	0.5
8	18.0	17.0	17.5	11.5	10.0	11.0	0.5	0.5	0.5	0.5	0.0	0.0
9	17.5	16.5	17.0	10.0	9.0	9.5	1.5	0.5	1.0	0.5	0.0	0.0
10	17.0	16.5	16.5	9.0	8.0	8.5	2.5	1.5	2.0	0.5	0.0	0.5
11	16.5	16.0	16.5	8.0	7.0	7.5	3.5	2.5	3.0	0.5	0.0	0.5
12	16.0	15.5	15.0	7.0	6.5	7.0	3.0	3.0	3.0	0.5	0.0	0.5
13	16.5	16.0	16.0	7.0	6.5	6.5	3.0	2.5	3.0	2.0	0.5	1.0
14	16.0	15.5	16.0	6.5	6.0	6.0	2.5	2.0	2.5	2.0	2.0	2.0
15	15.5	15.0	15.5	6.0	5.5	5.5	2.5	2.0	2.0	2.0	1.0	1.5
16	16.0	15.0	15.5	6.0	5.5	6.0	2.5	2.0	2.0	1.0	0.0	0.5
17	15.5	15.5	15.5	6.0	5.5	5.5	2.5	2.0	2.0	0.5	0.0	0.0
18	16.0	15.0	15.5	5.5	5.5	5.5	2.5	2.0	2.5	0.0	0.0	0.0
19	15.0	14.5	15.0	6.5	5.5	6.0	2.0	1.0	1.5	0.5	0.0	0.0
20	15.0	14.5	14.5	6.5	6.5	6.5	1.0	0.5	1.0	0.0	0.0	0.0
21	15.0	13.5	14.0	6.5	6.0	6.0	0.5	0.5	0.5	0.5	0.0	0.0
22	14.5	13.5	14.0	6.0	5.5	6.0	0.5	0.5	0.5	0.5	0.0	0.0
23	14.5	14.0	14.0	5.5	5.0	5.5	0.5	0.5	0.5	1.0	0.5	0.5
24	14.5	14.0	14.0	5.0	4.0	4.5	0.5	0.5	0.5	1.5	1.0	1.5
25	14.5	14.0	14.0	4.0	2.5	3.5	0.5	0.5	0.5	2.0	1.5	1.5
26	15.5	14.5	14.5	2.5	2.0	2.5	0.5	0.5	0.5	1.5	1.0	1.0
27	15.5	14.5	15.0	2.5	2.0	2.5	1.0	0.5	1.0	0.5	0.0	0.5
28	16.0	14.5	15.0	2.5	2.5	2.5	1.5	1.0	1.0	0.5	0.0	0.0
29	17.5	15.0	16.0	2.5	2.5	2.5	2.0	1.0	1.5	0.0	0.0	0.0
30	16.5	15.5	16.0	3.0	2.5	3.0	2.0	1.0	1.5	0.0	0.0	0.0
31	16.0	15.5	15.5	---	---	---	1.0	0.5	0.5	0.5	0.0	0.0
MONTH	20.5	13.5	16.0	16.0	2.0	7.5	3.5	0.5	1.5	2.0	0.0	0.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.5	0.5	0.0	0.0	3.0	2.0	2.5	10.0	9.5	9.5
2	0.5	0.0	0.0	1.5	0.5	1.0	3.5	3.0	3.0	10.0	9.5	9.5
3	0.0	0.0	0.0	2.0	1.0	1.5	3.5	3.0	3.5	9.5	9.0	9.5
4	0.0	0.0	0.0	1.0	0.5	1.0	3.5	3.0	3.0	9.0	8.5	8.5
5	0.0	0.0	0.0	1.0	0.0	0.5	3.5	2.5	3.0	8.5	7.5	8.0
6	0.0	0.0	0.0	0.5	0.0	0.5	3.5	3.0	3.0	8.5	7.5	8.0
7	0.0	0.0	0.0	0.5	0.0	0.5	---	---	---	9.0	8.0	8.5
8	0.0	0.0	0.0	1.0	0.5	1.0	---	---	---	9.5	9.0	9.5
9	0.0	0.0	0.0	1.0	0.5	1.0	---	---	---	9.5	9.5	9.5
10	0.5	0.0	0.0	1.0	0.0	0.5	---	---	---	9.5	9.0	9.5
11	0.0	0.0	0.0	1.0	0.5	0.5	---	---	---	9.5	9.0	9.0
12	0.0	0.0	0.0	1.5	1.0	1.0	---	---	---	9.5	9.0	9.5
13	0.0	0.0	0.0	2.0	1.5	1.5	---	---	---	10.5	9.5	10.0
14	0.0	0.0	0.0	2.0	1.5	2.0	4.5	4.0	4.0	12.0	10.5	11.5
15	1.0	0.0	0.5	1.5	1.0	1.0	4.0	4.0	4.0	12.5	12.0	12.5
16	1.5	1.0	1.5	1.5	0.5	1.0	4.5	3.5	4.0	13.0	12.5	12.5
17	1.5	1.0	1.0	2.5	1.5	2.0	4.0	4.5	5.5	13.5	12.5	13.0
18	0.5	0.5	0.5	2.5	2.0	2.5	6.5	6.0	6.0	13.5	13.0	13.0
19	0.5	0.0	0.0	2.0	1.0	1.5	7.0	6.5	6.5	13.5	13.5	13.5
20	0.0	0.0	0.0	1.0	1.0	1.0	6.5	6.0	6.5	13.5	13.0	13.0
21	0.0	0.0	0.0	1.5	1.0	1.0	6.0	5.5	5.5	14.5	13.0	13.5
22	0.0	0.0	0.0	1.5	1.0	1.0	5.5	5.0	5.5	16.0	14.5	15.0
23	0.0	0.0	0.0	1.5	1.0	1.5	5.5	5.5	5.5	17.5	15.5	16.5
24	0.0	0.0	0.0	1.5	1.0	1.0	6.5	5.5	6.0	18.5	17.5	17.5
25	0.0	0.0	0.0	1.0	0.5	1.0	7.0	6.5	7.0	17.5	17.0	17.5
26	0.0	0.0	0.0	1.0	1.0	1.0	7.5	7.0	7.5	18.0	17.0	17.5
27	0.0	0.0	0.0	1.5	1.0	1.0	7.5	7.0	7.5	18.0	17.0	17.5
28	0.0	0.0	0.0	2.0	1.5	2.0	8.5	7.5	8.0	19.5	18.5	19.5
29	0.0	0.0	0.0	2.5	2.0	2.5	9.5	8.5	9.0	20.0	19.5	20.5
30	---	---	---	2.5	2.0	2.0	---	---	---	21.0	20.5	20.5
31	---	---	---	2.5	2.0	2.0	---	---	---	21.0	20.5	20.5
MONTH	1.5	0.0	0.0	2.5	0.0	1.0	---	---	---	21.0	7.5	13.0

LOCATION.--Lat 42°27'10", long 71°34'52", Worcester County, two-parameter monitor at culvert on Brown Road, 400 ft upstream from Interstate Highway 495, 0.3 mile upstream from gaging station, and 1.1 miles west of East Bolton.

PERIOD OF RECORD.--Chemical analyses: June 1971 to September 1972.
Water temperatures: June 1971 to September 1972.

EXTREMES. --June 1971 to September 1972:

Specific conductance: Maximum, 195 micromhos Nov. 9, 1971; minimum, 54 micromhos May 31, 1972.

Water temperatures: Maximum, 26.5°C July 8, 1971; minimum, freezing point on many days during winter period.

REMARKS.--Figures of daily discharge, computed on basis of records for gaging station 0.3 mile downstream, are available at district office.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), JUNE TO SEPTEMBER 1971

[illegible]

01096906 BOULDER BROOK NEAR EAST BOLTON, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	140	134	137	110	98	103	---	---	82	88	86	87
2	143	134	140	102	94	98	---	---	87	86	75	83
3	144	136	142	111	96	104	---	---	89	86	76	83
4	136	137	134	107	97	101	---	---	91	85	81	84
5	141	134	134	104	104	106	---	---	93	83	81	82
6	139	135	134	100	103	105	---	---	94	85	82	84
7	136	132	134	106	90	101	---	---	98	84	81	83
8	133	120	131	92	89	91	---	---	96	85	83	84
9	137	126	131	105	88	104	---	---	98	87	77	83
10	132	77	114	92	90	91	---	---	87	83	76	81
11	---	---	90	93	89	92	---	---	82	84	81	83
12	---	---	106	91	89	90	---	---	83	83	80	81
13	129	115	125	90	88	89	---	---	84	83	77	81
14	130	122	124	89	88	89	---	---	86	81	76	80
15	131	121	124	91	80	90	---	---	86	84	82	83
16	133	124	129	91	88	90	---	---	81	96	84	90
17	133	120	131	88	85	86	---	---	82	100	91	96
18	133	120	131	91	87	90	---	---	84	95	91	93
19	131	120	130	91	90	91	---	---	87	91	85	88
20	131	124	120	92	90	91	---	---	88	87	83	86
21	131	120	129	90	87	90	96	95	95	86	84	85
22	132	127	130	95	75	78	102	95	97	86	86	86
23	134	126	131	78	76	77	105	99	102	87	85	86
24	131	120	130	92	78	80	98	87	92	87	83	85
25	131	98	113	---	---	101	97	91	94	87	83	86
26	104	98	101	---	---	99	95	92	94	96	87	93
27	108	98	102	---	---	100	93	90	91	98	95	96
28	104	96	99	---	---	96	89	87	89	96	92	94
29	107	97	100	---	---	88	91	88	89	93	91	92
30	98	94	96	---	---	75	89	85	87	93	91	92
31	100	93	96	---	---	---	88	84	85	93	91	92
MONTH	144	77	122	165	75	93	---	---	88	100	75	87

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	94	91	92	103	91	93	73	71	72	79	76	78
2	98	91	92	95	91	93	74	72	73	78	76	78
3	93	86	91	92	84	71	74	71	73	78	57	72
4	105	73	94	79	71	75	74	71	72	68	62	65
5	97	97	103	79	77	78	74	71	73	71	69	70
6	98	96	97	92	79	91	74	72	73	74	71	73
7	96	95	96	92	80	81	73	72	72	76	73	74
8	97	95	96	89	81	86	74	72	73	75	72	73
9	97	94	96	91	78	80	74	73	74	75	72	70
10	97	95	96	91	79	81	76	74	75	71	68	70
11	98	96	97	92	78	91	74	73	75	73	70	71
12	99	96	97	94	80	91	76	74	75	74	71	73
13	109	81	96	92	78	91	77	67	73	76	73	75
14	97	93	95	91	79	80	74	73	74	76	74	75
15	95	93	91	91	77	79	76	74	75	75	62	69
16	90	86	88	92	77	90	77	73	76	73	70	71
17	91	87	89	79	68	73	76	72	75	74	70	72
18	93	80	91	89	63	67	79	75	76	76	72	74
19	90	85	87	72	68	70	81	78	79	73	73	74
20	90	84	87	94	71	72	80	75	75	74	64	71
21	92	88	91	74	73	73	77	74	75	72	68	70
22	93	87	90	73	66	67	77	76	76	74	70	73
23	92	80	91	69	64	67	75	69	72	76	73	74
24	90	80	91	66	63	67	76	70	74	77	74	76
25	90	87	88	71	68	69	77	74	75	77	70	76
26	99	87	94	77	69	71	99	94	96	97	94	96
27	94	86	90	70	71	71	97	96	96	98	94	97
28	96	86	90	71	70	71	99	99	99	99	99	99
29	103	97	99	70	69	70	99	99	99	91	99	99
30	---	---	---	70	73	73	99	99	99	91	99	99
31	---	---	---	70	73	73	---	---	---	91	94	95
MONTH	100	73	82	103	54	76	91	67	75	91	64	74

MERRIMACK RIVER BASIN

01096906 BOULDER BROOK NEAR EAST BOLTON, MASS. --Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

TEMPERATURE (°C) OF WATER, JUNE TO SEPTEMBER 1971

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	RAIN	WIND	TEMP	RAIN	WIND	TEMP	RAIN	WIND	TEMP	RAIN	WIND	TEMP
1	0.00	0.00	0.00	25.9	19.5	21.9	26.0	22.0	24.0	0.00	0.00	0.00
2	0.00	0.00	0.00	29.9	18.0	19.9	29.9	25.9	24.9	0.00	0.00	0.00
3	0.00	0.00	0.00	20.0	18.0	17.9	25.0	22.9	23.9	0.00	0.00	0.00
4	0.00	0.00	0.00	21.9	18.0	18.0	22.0	18.9	20.0	0.00	0.00	0.00
5	0.00	0.00	0.00	24.9	18.9	20.9	22.0	17.9	18.9	0.00	0.00	0.00
6	0.00	0.00	0.00	25.0	18.5	21.5	23.0	17.0	20.0	0.00	0.00	0.00
7	0.00	0.00	0.00	25.9	20.0	22.9	24.9	20.0	23.0	0.00	0.00	0.00
8	0.00	0.00	0.00	24.9	19.9	22.9	24.9	20.0	23.0	21.0	20.0	20.9
9	0.00	0.00	0.00	24.9	20.0	22.9	25.0	21.0	22.9	22.0	19.9	20.9
10	0.00	0.00	0.00	25.0	20.0	22.0	24.9	21.0	22.9	21.0	18.0	19.9
11	17.0	18.5	16.0	22.0	20.0	21.0	24.0	21.9	23.0	20.9	18.0	19.0
12	18.9	18.9	16.9	24.0	19.0	21.0	24.0	20.0	23.0	20.9	18.0	19.0
13	17.9	18.0	16.9	27.9	18.9	20.9	23.9	19.9	21.9	0.00	0.00	0.00
14	17.0	18.9	19.9	23.9	19.9	21.0	23.0	19.9	21.0	18.9	18.0	19.0
15	17.0	18.9	19.9	23.9	19.0	20.9	23.0	20.9	21.0	21.9	18.0	19.0
16	17.9	18.0	18.0	25.0	19.0	21.0	23.9	19.9	20.9	20.9	18.9	21.9
17	18.9	18.9	18.9	21.0	20.0	21.0	21.9	17.0	18.9	20.0	20.0	20.9
18	19.9	18.0	17.9	21.9	19.9	21.0	21.9	17.9	18.0	20.0	19.9	20.0
19	20.0	18.0	18.9	20.9	19.0	20.0	21.9	17.9	18.0	20.0	19.9	20.0
20	20.9	17.9	18.9	17.9	18.9	18.0	24.9	18.9	20.9	20.9	18.0	18.9
21	21.0	17.9	18.9	24.0	19.0	21.0	24.0	20.9	20.0	20.9	18.0	18.9
22	20.0	18.0	19.9	23.9	19.0	21.0	23.9	20.9	20.0	20.9	17.0	18.0
23	19.0	17.0	18.0	24.0	19.9	21.0	23.0	20.0	20.0	20.9	17.0	18.0
24	20.9	18.0	18.9	24.0	19.9	21.9	23.0	19.0	18.9	20.0	17.0	17.0
25	21.0	17.9	18.9	22.9	20.9	21.9	24.9	20.0	20.9	21.0	18.0	19.9
26	20.0	17.0	18.0	23.0	20.0	21.0	24.0	19.9	19.0	20.0	18.0	19.0
27	20.0	18.9	17.9	24.0	19.9	21.0	24.0	20.0	19.0	20.0	18.0	19.0
28	20.0	18.9	18.0	24.0	19.9	21.0	24.0	20.0	19.0	20.0	18.0	19.9
29	20	0.00	0.00	24.0	19.9	21.0	23.0	20.0	20.0	0.00	0.00	0.00
30	0.00	0.00	0.00	24.0	19.9	21.0	23.0	20.0	20.0	0.00	0.00	0.00
31	0.00	0.00	0.00	24.0	19.9	21.0	23.0	20.0	20.0	0.00	0.00	0.00

MERRIMACK RIVER BASIN

279

01096906 BOULDER BROOK NEAR EAST BOLTON, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.5	14.0	15.0	16.0	12.5	14.0	---	---	---	0.5	0.0	0.5
2	17.5	14.0	15.5	14.5	14.0	14.0	---	---	---	0.5	0.5	0.5
3	17.0	14.5	16.5	14.0	12.0	13.0	---	---	---	1.5	0.5	1.0
4	15.5	13.0	14.0	11.5	9.0	10.5	---	---	---	1.5	0.5	1.0
5	17.0	14.5	15.5	10.0	7.0	8.5	---	---	---	1.5	0.0	1.0
6	17.0	15.0	16.0	10.0	6.5	8.0	---	---	---	0.5	0.0	0.0
7	15.5	13.5	14.5	9.0	6.0	8.0	---	---	---	0.5	0.0	0.0
8	14.0	12.0	13.0	6.0	3.5	5.0	---	---	---	0.5	0.0	0.0
9	14.0	11.5	13.0	4.5	2.0	3.0	---	---	---	0.5	0.0	0.0
10	13.5	12.5	13.0	5.0	2.5	4.0	---	---	---	0.5	0.5	0.5
11	---	---	---	4.5	3.5	4.0	---	---	---	2.0	0.5	1.5
12	---	---	---	5.0	3.0	4.0	---	---	---	2.5	1.0	2.0
13	13.0	12.5	12.5	6.0	3.5	5.0	---	---	---	4.0	1.0	2.5
14	15.5	12.0	13.5	4.5	2.0	3.0	---	---	---	4.5	0.5	2.5
15	16.0	13.5	14.5	3.5	1.5	2.5	---	---	---	1.0	0.0	0.5
16	16.0	13.5	14.5	5.5	3.0	4.0	---	---	---	0.5	0.0	0.0
17	15.0	13.0	14.5	5.0	1.5	3.5	---	---	---	0.5	0.0	0.0
18	15.0	12.5	13.5	6.5	4.5	5.5	---	---	---	0.5	0.0	0.5
19	13.5	12.0	13.0	7.5	4.0	6.0	---	---	---	0.5	0.0	0.5
20	14.0	12.0	13.0	7.5	4.5	6.5	---	---	---	1.0	0.0	0.5
21	14.0	11.5	13.0	4.5	3.5	4.5	1.0	1.0	1.0	1.0	0.0	0.5
22	15.0	12.0	13.5	4.0	2.0	3.0	1.0	0.5	0.5	1.0	0.0	0.5
23	15.0	13.0	14.0	3.0	0.5	2.0	1.0	0.5	0.5	2.0	1.0	1.5
24	13.5	13.0	13.0	2.5	0.5	1.5	2.0	0.5	1.0	2.5	1.0	1.5
25	13.0	12.5	12.5	---	---	---	1.5	0.0	0.5	2.5	0.0	1.5
26	15.0	12.5	13.5	---	---	---	2.5	0.5	1.5	0.5	0.0	0.5
27	16.0	13.5	14.5	---	---	---	2.0	1.5	2.0	1.0	0.0	0.5
28	17.0	15.0	15.5	---	---	---	3.5	1.5	2.5	0.5	0.0	0.0
29	16.0	13.5	14.5	---	---	---	2.5	0.5	1.5	0.5	0.0	0.0
30	15.0	11.5	13.0	---	---	---	1.5	0.5	1.0	0.5	0.0	0.0
31	13.5	12.0	12.5	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
MONTH	17.5	11.5	14.0	16.0	0.5	6.0	---	---	---	4.5	0.0	0.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.0	1.5	0.5	0.5	8.5	2.0	5.0	14.0	10.5	12.5
2	0.0	0.0	0.0	1.0	0.5	0.5	7.0	3.0	5.0	12.5	8.5	10.0
3	0.5	0.0	0.0	0.5	0.0	0.0	6.5	3.5	5.5	8.5	7.5	8.0
4	0.5	0.0	0.0	0.5	0.0	0.0	5.0	3.0	4.0	9.0	7.5	8.0
5	0.0	0.0	0.0	0.0	0.0	0.0	7.0	2.0	4.5	10.0	7.5	9.0
6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	4.5	13.5	7.0	10.5
7	0.0	0.0	0.0	0.5	0.0	0.0	4.0	2.0	3.0	13.0	9.5	11.5
8	0.0	0.0	0.0	1.0	0.0	0.5	6.0	1.5	3.5	11.5	8.0	9.5
9	0.0	0.0	0.0	1.0	0.0	0.0	6.5	2.0	4.0	8.0	6.5	7.5
10	0.0	0.0	0.0	0.5	0.0	0.0	7.5	3.0	5.0	10.5	6.0	8.0
11	0.0	0.0	0.0	1.0	0.0	0.5	5.0	3.5	4.5	9.5	6.5	8.5
12	0.0	0.0	0.0	1.0	0.5	1.0	9.0	3.5	6.0	11.0	6.5	9.0
13	1.0	0.0	0.0	3.0	0.5	1.5	6.0	4.0	4.5	15.0	7.5	11.5
14	0.0	0.0	0.0	0.5	0.0	0.0	7.0	3.5	5.5	14.0	10.5	12.5
15	1.0	0.0	0.5	0.0	0.0	0.0	6.0	5.0	5.5	12.5	11.0	12.0
16	1.5	0.0	0.5	1.5	0.0	0.5	10.5	4.5	7.5	16.0	11.0	13.0
17	0.5	0.0	0.0	1.0	0.5	0.5	11.5	6.5	8.5	14.0	12.0	13.0
18	1.0	0.0	0.5	2.5	0.5	1.0	12.0	6.5	9.5	16.5	11.5	14.0
19	0.5	0.0	0.0	3.5	0.0	1.5	13.5	8.5	11.0	14.0	11.0	12.5
20	0.0	0.0	0.0	3.0	0.0	1.5	10.5	5.0	7.5	11.0	10.0	10.5
21	0.0	0.0	0.0	4.0	1.0	2.5	10.0	4.0	7.0	17.0	10.0	13.5
22	0.0	0.0	0.0	2.0	1.0	2.0	8.5	5.0	7.0	17.0	13.0	15.0
23	0.0	0.0	0.0	4.0	1.5	3.0	7.5	6.0	6.5	17.5	12.0	15.0
24	0.0	0.0	0.0	3.0	2.0	2.5	9.0	6.0	7.5	15.5	12.5	14.0
25	0.5	0.0	0.0	4.0	1.0	2.5	10.5	5.5	8.0	14.0	11.0	12.5
26	0.0	0.0	0.0	4.5	0.5	2.5	10.5	5.0	7.5	13.5	9.5	12.0
27	0.5	0.0	0.0	3.0	0.5	2.0	8.5	5.0	7.0	15.0	10.0	12.5
28	0.5	0.0	0.5	4.5	0.0	2.0	11.0	4.5	8.0	17.0	11.5	14.5
29	1.0	0.0	0.5	5.5	2.0	3.5	13.0	7.0	10.0	16.5	13.0	15.0
30	---	---	---	4.0	3.0	3.5	14.0	7.5	11.0	16.5	13.5	15.5
31	---	---	---	3.5	2.5	3.0	---	---	---	16.5	14.5	15.5
MONTH	1.5	0.0	0.0	5.5	0.0	1.0	14.0	1.5	6.5	17.5	6.0	12.0

01096906 BOULDER BROOK NEAR EAST BOLTON, MASS. --Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.5	14.0	14.5	14.5	12.5	13.5	19.5	16.5	18.0	24.0	20.5	22.0
2	15.5	13.0	14.0	17.5	13.5	15.5	19.5	17.0	18.0	22.0	20.5	21.5
3	16.0	12.5	14.5	17.5	15.5	16.5	19.5	16.5	18.0	22.0	18.0	19.5
4	16.5	13.5	15.0	17.0	14.5	15.5	20.0	16.0	18.0	18.5	17.0	18.0
5	15.0	13.5	14.0	15.5	13.0	13.5	19.5	14.0	16.5	19.0	16.0	17.0
6	14.0	12.0	13.0	14.5	12.0	13.0	21.0	14.0	17.5	20.0	15.5	17.5
7	14.0	12.5	13.0	15.5	12.0	13.5	20.0	17.0	18.5	20.5	15.5	18.0
8	13.0	12.0	12.5	17.0	13.0	14.5	19.5	17.0	18.5	22.0	17.5	20.0
9	15.0	12.0	13.5	16.5	13.5	15.0	19.0	16.5	17.5	21.0	17.5	19.5
10	14.0	12.0	13.0	17.0	14.5	15.5	18.5	15.0	16.5	17.0	15.0	16.0
11	12.5	10.0	11.5	18.5	15.0	16.5	20.0	13.5	17.0	17.0	13.5	15.5
12	12.5	9.5	11.5	19.5	15.5	17.5	19.0	15.5	17.5	19.5	16.0	17.5
13	13.5	11.5	12.5	18.5	17.0	17.5	23.0	16.0	19.0	14.0	16.5	17.5
14	16.0	12.5	14.0	19.0	16.0	17.5	20.0	16.0	18.5	19.0	17.0	18.0
15	17.0	14.0	15.5	21.5	17.5	19.0	18.0	15.0	16.0	17.5	15.0	16.5
16	15.5	14.5	15.0	21.0	18.5	19.5	19.0	14.0	16.5	18.5	15.0	16.5
17	16.0	13.5	14.5	21.5	18.5	20.0	18.5	16.5	17.5	21.0	16.0	18.5
18	14.5	13.5	14.0	21.5	18.5	20.0	19.0	16.0	17.5	22.0	18.5	20.0
19	13.5	12.5	12.5	22.0	18.5	20.0	20.5	17.5	18.5	20.5	17.0	18.5
20	15.5	12.5	13.5	20.0	18.0	18.5	21.5	16.0	18.5	17.0	15.0	15.5
21	15.5	13.5	14.5	20.0	17.5	18.5	23.5	17.0	20.0	15.0	13.5	14.0
22	15.5	13.5	14.0	21.5	18.0	20.0	23.0	18.0	20.0	18.0	15.0	16.0
23	13.5	12.5	13.0	20.5	18.5	19.5	22.0	18.5	20.5	15.5	13.0	14.5
24	14.0	12.5	13.0	21.0	18.0	19.5	22.5	20.0	21.5	16.0	13.0	14.5
25	13.5	11.5	12.5	20.5	18.5	19.5	23.5	20.5	22.0	17.5	15.0	16.0
26	13.0	12.0	12.5	19.5	17.5	18.5	25.0	21.5	23.0	19.0	16.0	17.5
27	16.0	12.0	13.5	20.0	17.0	18.5	23.5	20.5	21.5	20.0	18.0	19.0
28	17.0	13.5	15.0	20.0	16.5	18.5	23.0	20.5	21.5	19.0	15.0	16.5
29	16.5	13.5	15.0	20.0	17.0	18.5	24.0	20.0	21.5	15.5	14.5	15.0
30	15.5	13.0	14.0	19.5	16.0	18.0	24.5	20.5	22.0	18.0	15.5	16.5
31	---	---	---	18.5	16.0	17.0	24.5	20.0	22.0	---	---	---
MONTH	17.0	9.5	13.5	22.0	12.0	17.5	25.0	13.5	19.0	24.0	13.0	17.5
YEAR	25.0	0.0	9.5									

281

LOCATION.--Lat 42°27'04", long 71°34'39", Worcester County, two-parameter monitor at gaging station on right bank 900 ft downstream from Interstate Highway 495, 0.9 mile west of East Bolton, and 1.3 miles upstream from mouth.

PERIOD OF RECORD.--Chemical analyses: June 1971 to September 1972.
Water temperatures: June 1971 to September 1972.

Specific conductance: Maximum, 754 micromhos Feb. 13, 1972; minimum, 78 micromhos June 1, 1972.
Water temperatures: Maximum, 28.0°C June 30, 1971; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), JUNE TO SEPTEMBER 1971

[illegible]

MERRIMACK RIVER BASIN

01096910 BOULDER BROOK AT EAST BOLTON, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	503	495	499	410	398	403	193	165	180	190	183	188
2	513	503	507	397	244	328	219	194	204	458	182	221
3	515	500	507	276	244	261	224	220	222	184	163	172
4	511	503	507	309	246	265	240	222	228	197	173	181
5	518	465	506	312	285	299	253	238	244	173	162	165
6	473	418	447	328	309	320	305	240	255	184	176	180
7	493	475	488	333	248	302	577	185	253	204	183	188
8	495	490	492	285	247	264	203	190	200	196	186	189
9	498	128	392	313	287	303	215	204	211	448	193	239
10	265	157	217	320	313	316	205	188	196	195	154	161
11	348	270	311	342	302	318	209	178	184	173	163	168
12	378	349	365	310	291	299	196	190	192	177	159	165
13	392	381	387	307	295	300	200	190	193	177	152	169
14	418	394	405	320	302	312	219	190	205	170	152	160
15	427	414	421	328	309	323	202	162	176	188	171	177
16	437	426	431	315	289	305	186	170	180	217	198	201
17	446	430	438	289	275	283	---	---	175	223	210	216
18	446	442	444	300	285	295	---	---	183	209	188	201
19	458	445	453	312	300	305	---	---	200	199	165	177
20	458	445	451	315	306	305	---	---	205	180	172	176
21	463	451	456	318	298	312	265	205	229	185	172	175
22	473	458	463	422	253	313	221	198	205	177	175	176
23	475	456	464	300	245	262	225	218	221	183	164	173
24	468	448	460	278	256	271	385	156	213	202	151	166
25	446	251	315	303	269	279	186	156	172	175	145	158
26	319	260	291	277	241	261	196	181	187	188	163	174
27	350	321	335	260	246	255	194	181	184	193	180	187
28	376	351	362	272	211	235	196	175	184	188	180	184
29	379	367	373	292	135	205	189	178	185	180	175	178
30	397	376	390	165	132	150	213	186	194	179	175	177
31	402	392	395	---	---	---	192	179	182	182	176	179
MONTH	518	128	419	422	132	289	577	156	201	458	145	181
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	187	178	182	321	163	213	124	115	120	149	146	147
2	182	177	180	228	170	186	122	118	120	151	139	144
3	179	177	178	190	116	140	124	120	122	147	85	131
4	---	---	125	169	122	137	129	118	123	120	91	108
5	---	---	147	167	131	135	125	119	123	134	119	125
6	---	---	172	142	132	137	128	125	127	135	128	131
7	---	---	172	154	131	139	190	121	136	144	133	135
8	---	---	178	195	142	157	137	126	131	139	123	130
9	---	---	178	144	129	137	133	126	130	121	112	117
10	---	---	186	145	131	139	132	128	131	128	114	121
11	182	176	178	148	132	141	146	131	134	134	127	129
12	186	176	181	154	140	144	136	131	134	144	127	130
13	754	153	229	153	143	147	156	107	130	137	130	134
14	181	152	160	145	133	141	129	114	123	139	135	137
15	165	135	152	155	138	145	133	129	131	143	93	117
16	154	139	148	175	139	149	147	124	135	132	118	124
17	161	151	156	182	129	147	130	112	122	131	122	126
18	157	153	155	238	107	120	137	130	134	137	129	133
19	---	---	152	130	110	119	140	137	138	136	133	134
20	---	---	128	132	119	125	144	111	128	136	103	130
21	---	---	153	134	121	126	132	119	127	126	98	115
22	---	---	163	129	86	116	139	132	134	134	127	131
23	---	---	167	101	87	96	142	107	120	142	134	137
24	---	---	167	109	99	106	134	122	126	143	139	141
25	---	---	167	114	108	111	134	130	132	145	140	142
26	---	---	167	118	113	115	137	135	136	146	143	145
27	---	---	168	120	114	118	139	137	137	151	144	147
28	201	158	178	123	116	120	141	138	139	154	148	151
29	179	158	165	121	112	117	143	141	142	156	150	153
30	---	---	---	120	115	118	147	143	145	161	154	159
31	---	---	---	122	120	121	---	---	---	168	159	163
MONTH	---	---	167	321	86	134	190	107	130	168	85	134

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	27.5	20.0	22.5	---	---	---	19.0	12.0	15.5
2	---	---	---	18.0	16.0	21.0	---	---	---	19.0	11.5	15.0
3	---	---	---	25.0	15.0	19.0	25.0	20.5	23.0	21.0	14.0	17.0
4	---	---	---	25.5	13.0	19.0	21.5	19.0	20.5	23.5	17.0	20.0
5	---	---	---	26.5	15.0	20.0	24.5	17.0	20.0	24.0	18.5	21.0
6	---	---	---	25.5	14.5	20.0	23.5	15.5	19.0	21.0	17.0	18.5
7	---	---	---	26.5	18.0	22.0	24.0	16.0	19.5	21.5	16.0	18.0
8	---	---	---	27.5	17.0	22.0	24.5	15.5	19.5	22.5	17.0	19.5
9	---	---	---	26.5	17.5	22.0	26.0	18.0	21.5	23.0	18.0	20.5
10	21.0	14.5	17.5	25.5	17.5	21.0	26.0	18.5	22.0	20.5	15.5	18.0
11	19.5	12.0	15.5	21.0	16.5	19.0	25.5	20.5	22.0	21.5	16.0	18.5
12	22.0	13.0	17.0	25.0	15.0	19.5	23.5	18.0	20.5	21.5	19.0	20.0
13	19.5	10.5	16.5	23.5	14.0	18.5	23.0	14.5	18.5	19.5	17.5	18.5
14	19.5	13.5	16.0	25.0	17.5	20.0	23.0	15.0	18.5	19.0	17.0	18.0
15	20.0	12.0	15.5	24.0	15.5	19.5	22.0	18.0	19.5	22.0	17.0	19.0
16	21.0	7.5	16.0	24.0	15.5	19.5	23.0	17.0	19.5	22.0	15.5	18.5
17	23.0	13.0	17.5	23.0	18.0	20.0	22.5	14.0	18.0	20.0	17.0	18.0
18	24.5	14.5	19.0	23.5	15.5	19.5	23.5	15.5	19.5	19.5	17.0	18.0
19	25.0	15.0	19.5	18.0	14.0	16.5	23.5	16.0	19.5	18.5	14.0	16.0
20	25.0	15.5	20.0	21.5	16.0	18.5	24.0	19.5	21.5	16.5	14.5	15.5
21	25.5	16.5	20.5	23.5	14.5	19.0	24.0	18.5	21.0	19.0	16.0	17.0
22	26.0	17.5	21.0	24.0	15.5	19.5	24.0	18.0	20.5	16.5	12.5	14.5
23	23.5	17.0	19.5	24.0	15.5	19.5	21.5	16.5	18.5	16.0	10.5	13.0
24	25.5	16.5	20.5	24.5	17.0	20.5	19.0	12.5	15.5	15.0	12.0	14.0
25	26.0	16.0	21.0	22.0	19.0	20.0	19.0	12.0	15.5	14.0	8.5	11.0
26	25.0	18.0	20.5	24.0	18.0	21.0	21.0	14.5	17.5	14.0	9.5	11.5
27	23.0	14.5	18.5	26.0	19.5	22.0	17.0	15.5	16.0	14.0	9.0	11.0
28	25.0	15.5	19.5	24.5	16.5	20.0	21.5	15.5	18.0	15.0	11.5	13.0
29	22.0	14.0	17.5	24.0	16.5	20.0	23.0	16.5	19.0	17.5	13.5	15.5
30	28.0	16.5	22.0	21.0	19.5	20.5	23.5	18.5	19.5	17.0	12.5	14.5
31	---	---	---	---	---	---	21.0	16.0	18.0	---	---	---
MONTH PERIOD	---	---	---	27.5	13.0	20.0	26.0	12.0	19.5	24.0	8.5	16.5

MERRIMACK RIVER BASIN

01096910 BOULDER BROOK AT EAST BOLTON, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.5	10.0	12.5	16.0	10.5	13.5	1.5	0.0	0.5	0.5	0.0	1.5
2	17.0	10.5	13.5	14.5	13.0	14.0	0.5	0.0	0.0	1.0	0.0	1.5
3	15.0	9.5	13.5	14.0	11.0	12.0	1.0	0.0	0.0	2.0	0.0	1.0
4	13.5	8.5	11.5	10.5	6.0	8.5	1.0	0.0	0.0	2.0	0.0	1.0
5	15.0	12.5	13.5	8.5	4.5	6.0	0.5	0.0	0.0	2.0	0.0	1.0
6	13.5	10.0	12.0	9.0	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
7	11.0	7.5	9.0	8.0	4.0	6.5	1.0	0.0	0.5	0.5	0.0	0.0
8	12.5	7.5	9.5	4.5	1.0	3.0	2.0	1.0	1.5	0.0	0.0	0.0
9	13.5	10.5	11.5	3.5	0.0	1.5	4.5	3.0	3.5	0.0	0.0	0.0
10	14.5	12.0	13.0	5.0	0.5	2.5	5.0	2.0	3.5	1.0	0.0	0.5
11	13.0	9.5	11.5	5.0	2.0	3.0	5.5	1.0	3.0	3.0	0.5	1.5
12	11.5	7.5	9.5	5.0	1.5	3.5	4.5	3.0	3.5	3.5	1.0	2.5
13	12.5	11.0	12.0	6.5	1.5	4.5	4.0	0.5	2.0	6.0	1.0	3.5
14	16.5	10.0	13.0	3.0	0.0	1.0	6.5	2.0	3.5	6.0	1.0	3.5
15	16.5	11.5	13.5	2.5	0.0	1.0	6.5	2.0	4.0	2.0	0.0	1.0
16	15.0	10.0	12.5	5.0	1.0	2.5	3.5	1.5	3.0	0.5	0.0	0.0
17	12.5	8.5	11.0	3.5	0.0	1.5	---	---	---	0.5	0.0	0.5
18	11.5	7.0	9.5	7.0	3.5	4.5	---	---	---	1.0	0.0	0.5
19	11.5	6.0	9.0	8.5	2.0	6.0	---	---	---	2.0	0.5	1.0
20	12.5	9.0	10.5	8.0	3.0	6.0	---	---	---	2.0	0.5	1.0
21	12.0	7.0	9.5	4.0	2.0	3.0	2.0	1.0	1.5	2.5	0.5	1.5
22	13.0	7.0	9.5	4.0	0.5	2.0	1.0	0.0	0.0	2.5	0.5	1.5
23	14.5	9.0	11.0	1.5	0.0	0.5	1.0	0.0	0.0	3.5	2.0	2.5
24	11.0	9.5	10.0	1.5	0.0	0.5	2.0	0.5	1.5	4.5	2.0	2.5
25	12.5	10.5	11.5	1.0	0.0	0.0	2.0	0.0	0.5	4.0	0.0	2.0
26	16.5	11.5	13.5	0.0	0.0	0.0	3.5	0.5	2.0	0.0	0.0	0.0
27	17.0	12.0	14.0	1.0	0.0	0.5	3.0	2.0	2.5	0.0	0.0	0.0
28	17.5	13.0	15.0	2.5	0.5	1.5	4.5	1.5	3.0	0.0	0.0	0.0
29	14.5	10.0	12.0	2.0	0.0	1.5	2.5	0.5	1.5	0.0	0.0	0.0
30	13.5	8.0	10.5	4.0	0.5	2.0	1.5	0.0	0.5	0.5	0.0	0.0
31	12.0	9.0	10.5	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
MONTH	17.5	6.0	11.5	16.0	0.0	4.0	6.5	0.0	1.5	6.0	0.0	1.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.5	0.0	0.0	9.5	2.0	5.5	16.5	10.0	13.0
2	0.0	0.0	0.0	0.5	0.0	0.5	7.5	3.0	5.5	13.5	8.5	11.0
3	0.0	0.0	0.0	0.5	0.0	0.0	7.0	3.5	5.5	9.5	8.0	8.5
4	---	---	---	1.0	0.0	0.0	5.5	3.0	4.0	9.5	8.0	8.5
5	---	---	---	0.0	0.0	0.0	8.0	1.5	4.5	11.0	8.0	9.5
6	---	---	---	0.0	0.0	0.0	6.0	2.5	4.5	16.0	7.0	11.0
7	---	---	---	0.5	0.0	0.0	4.5	1.5	2.5	14.5	10.0	12.0
8	---	---	---	1.0	0.0	0.5	7.0	0.5	3.0	12.0	9.5	10.0
9	---	---	---	1.5	0.0	0.0	7.0	1.5	4.0	8.5	7.0	7.5
10	---	---	---	1.5	0.0	0.0	6.5	2.0	4.5	11.5	6.0	8.5
11	0.0	0.0	0.0	2.0	0.0	1.0	5.0	3.0	4.0	10.0	6.5	8.5
12	0.0	0.0	0.0	2.0	0.5	1.0	9.5	2.5	6.0	12.0	6.5	9.0
13	0.0	0.0	0.0	4.5	0.5	2.0	5.0	3.0	4.0	16.5	7.0	11.5
14	0.0	0.0	0.0	1.0	0.0	0.5	7.0	3.0	5.0	15.5	10.5	13.0
15	1.0	0.0	0.0	0.0	0.0	0.0	5.5	4.5	5.0	13.0	11.5	12.0
16	1.5	0.0	0.5	2.5	0.0	1.0	11.5	4.0	7.5	17.0	11.0	13.5
17	0.0	0.0	0.0	1.5	0.0	1.0	12.5	6.0	8.5	15.0	12.5	13.5
18	0.0	0.0	0.0	5.0	0.5	1.5	13.5	5.5	9.0	18.5	11.5	14.5
19	0.0	0.0	0.0	5.0	0.0	1.5	14.5	8.0	11.0	15.5	11.5	13.5
20	---	---	---	4.0	0.0	1.5	10.5	4.5	7.0	11.5	10.0	10.5
21	---	---	---	5.0	0.5	2.5	11.0	3.5	6.5	18.0	10.0	13.5
22	---	---	---	2.5	1.0	2.0	9.0	4.5	7.0	18.5	13.0	15.5
23	---	---	---	5.0	1.0	2.5	7.5	6.0	6.5	20.0	11.0	15.0
24	---	---	---	3.5	2.0	2.5	4.5	5.5	7.5	1.5	12.0	15.0
25	---	---	---	4.5	0.5	2.5	12.0	5.0	8.0	17.5	10.5	13.5
26	---	---	---	5.5	0.0	2.5	11.0	5.0	7.5	17.0	8.5	12.5
27	---	---	---	4.0	0.0	2.5	9.0	4.5	6.5	14.5	9.5	13.5
28	0.5	0.0	0.0	5.5	0.0	2.5	12.5	4.5	8.0	20.0	11.0	15.0
29	0.5	0.0	0.0	6.5	2.5	4.5	15.0	7.0	10.5	21.0	13.0	16.5
30	---	---	---	4.0	3.5	4.0	16.5	7.0	11.5	20.0	13.5	16.5
31	---	---	---	3.5	3.0	3.5	---	---	---	19.5	16.0	17.5
MONTH	---	---	---	6.5	0.0	1.5	16.5	0.5	6.5	21.0	6.0	12.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

MERRIMACK RIVER BASIN

01097300 NASHOBA BROOK NEAR ACTON, MASS.

LOCATION.--Lat 42°30'39", long 71°24'25", Middlesex County, two-parameter monitor at gaging station on right bank 1,500 ft downstream from dam at North Acton, 2.2 miles northeast of Acton, and 5 miles above mouth.

DRAINAGE AREA.--12.7 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.

Water temperatures: November 1971 to September 1972.

EXTREMES.--November 1971 to September 1972:

Specific conductance: Maximum, 371 micromhos May 13; minimum, 91 micromhos June 10, 11.

Water temperatures: Maximum, 26.0° C July 18, Aug. 26; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	220	---	---	200	173	165	168	197	194	195
2	---	---	220	---	---	195	192	173	185	201	198	199
3	---	---	218	---	---	184	209	193	203	244	193	207
4	---	---	225	---	---	177	217	209	214	237	209	215
5	---	---	225	---	---	167	224	217	221	222	206	214
6	---	---	225	---	---	175	231	224	228	215	205	209
7	---	---	220	---	---	160	237	228	231	219	215	217
8	---	---	220	---	---	180	237	218	224	218	216	218
9	---	---	218	---	---	207	238	217	228	222	217	220
10	---	---	195	---	---	186	238	222	231	225	203	216
11	---	---	165	---	---	185	222	206	214	225	203	219
12	---	---	162	---	---	148	204	198	202	221	201	212
13	---	---	172	---	---	187	204	202	203	204	194	201
14	---	---	180	---	---	227	205	201	202	192	176	181
15	---	---	185	---	---	218	205	204	205	189	180	186
16	---	---	190	---	---	219	203	200	202	206	189	198
17	---	---	195	---	---	213	200	197	199	229	206	219
18	---	---	195	212	208	210	196	192	193	236	230	234
19	---	---	198	212	211	212	210	192	201	235	218	228
20	---	---	200	212	209	211	215	206	212	217	207	210
21	---	---	200	210	204	208	216	214	215	208	206	208
22	---	---	202	205	201	203	217	211	213	207	205	206
23	---	---	202	204	200	202	227	211	220	209	206	208
24	---	---	203	206	200	203	229	211	223	205	194	200
25	---	---	198	211	205	208	216	192	204	194	187	190
26	---	---	188	214	212	213	210	196	206	197	186	190
27	---	---	183	214	207	212	203	194	199	221	199	215
28	---	---	185	207	198	201	194	187	192	225	221	223
29	---	---	192	200	189	197	189	185	187	223	217	221
30	---	---	214	198	172	188	194	189	193	217	215	216
31	---	---	202	---	---	---	198	194	196	217	215	216
MONTH	---	---	200	---	---	197	238	165	207	244	176	209

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	220	216	218	223	213	218	144	140	142	163	159	161
2	221	219	220	240	223	230	143	140	142	163	162	163
3	220	212	219	240	190	181	141	137	139	163	145	160
4	208	171	194	153	141	147	137	134	136	141	124	131
5	260	187	244	161	142	153	137	133	135	131	126	129
6	257	251	255	167	161	163	139	137	138	142	131	136
7	251	241	246	173	168	171	138	136	137	150	142	146
8	240	231	234	174	163	169	145	136	140	150	144	146
9	237	233	236	174	164	169	148	145	147	144	137	140
10	234	229	232	179	168	175	149	148	149	141	136	138
11	230	227	229	185	178	183	149	146	148	197	139	157
12	230	226	228	184	182	184	148	145	146	147	140	145
13	229	205	223	185	179	183	148	136	144	371	145	161
14	211	174	189	182	178	180	136	132	135	155	149	153
15	188	175	182	182	178	180	139	137	139	150	118	139
16	175	167	172	187	180	185	141	138	140	---	---	112
17	182	171	177	184	154	167	138	134	136	136	132	134
18	189	182	187	154	128	134	142	139	141	143	136	140
19	188	182	185	133	128	130	146	142	144	149	143	146
20	189	185	186	143	133	138	148	137	144	149	138	145
21	184	182	183	146	143	144	140	136	138	137	132	134
22	188	183	185	145	126	139	143	141	142	139	133	137
23	191	187	189	126	111	117	143	134	137	145	138	142
24	200	191	196	122	111	116	139	135	137	150	145	148
25	200	199	199	132	122	127	145	139	142	151	148	150
26	198	195	197	139	132	135	149	145	148	155	150	153
27	195	192	194	145	139	143	153	150	152	158	153	156
28	199	193	194	148	145	147	156	153	154	164	154	160
29	212	197	201	148	146	147	157	155	156	165	161	163
30	---	---	---	147	143	145	159	157	159	169	164	166
31	---	---	---	144	142	143	---	---	---	172	154	168
MONTH	260	167	207	240	111	159	159	132	143	371	118	147
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	150	104	126	138	134	136	186	163	165	198	194	197
2	112	105	110	137	133	135	186	164	165	195	190	193
3	126	112	119	141	137	139	187	165	166	190	143	173
4	134	126	131	143	139	141	172	167	169	200	180	191
5	134	127	130	144	142	143	174	171	172	216	201	212
6	132	127	130	146	144	145	175	172	173	209	202	205
7	134	131	133	152	146	148	175	174	175	204	200	202
8	138	133	136	167	151	156	176	174	176	203	197	201
9	137	133	136	170	160	166	176	174	175	203	196	200
10	129	91	109	159	156	158	176	173	174	199	196	198
11	98	91	95	161	157	159	178	175	176	197	193	195
12	114	98	106	163	159	161	192	179	185	195	188	191
13	124	115	121	166	163	164	193	190	192	192	187	189
14	131	123	128	166	163	165	193	188	192	189	182	185
15	137	132	135	169	164	166	191	189	190	183	180	182
16	141	137	140	171	167	169	190	185	187	181	173	178
17	145	140	142	173	169	171	187	185	186	181	171	176
18	145	143	144	172	170	171	191	186	188	184	178	181
19	143	141	142	173	162	167	192	187	190	185	179	181
20	142	141	142	158	107	138	192	188	190	183	179	181
21	144	142	143	117	105	111	191	188	190	183	180	182
22	144	139	143	129	117	123	193	188	191	189	181	183
23	138	128	133	139	129	133	192	189	191	194	188	191
24	127	125	126	146	138	141	192	188	190	194	189	192
25	129	125	128	151	146	148	190	178	184	196	191	194
26	132	128	130	156	152	154	180	177	178	196	191	194
27	138	132	136	171	154	159	179	174	176	198	194	196
28	142	137	139	190	174	181	178	175	177	198	195	197
29	146	141	143	177	160	166	182	176	179	198	195	196
30	146	138	143	163	160	162	197	184	192	195	190	193
31	-	-	-	164	163	163	201	196	198	---	---	---
MONTH	150	91	131	190	105	153	201	183	182	216	143	191
YEAR	371	91	177									

MERRIMACK RIVER BASIN

01097300 NASHOBA BROOK NEAR ACTON, MASS.--Confined

CHLORIDE (MG/L AS CL), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

NOTE.--Chloride concentrations based on relationship with specific conductance.

CHLORIDE LOADS AS NaCl, POUNDS PER DAY, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

MERRIMACK RIVER BASIN

289

01097300 NASHOBA BROOK NEAR ACTON, MASS.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972

DAY	NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0
2	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
3	---	---	---	0.5	0.0	0.5	0.5	0.0	0.0
4	---	---	---	1.0	0.0	0.5	0.0	0.0	0.0
5	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0
6	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
7	---	---	---	1.0	0.5	0.5	0.0	0.0	0.0
8	---	---	---	1.0	0.5	0.5	0.0	0.0	0.0
9	---	---	---	1.0	0.5	0.5	0.0	0.0	0.0
10	---	---	---	1.5	0.5	1.0	0.0	0.0	0.0
11	---	---	---	1.5	1.0	1.0	0.0	0.0	0.0
12	---	---	---	1.5	0.5	1.0	0.0	0.0	0.0
13	---	---	---	1.0	0.5	1.0	0.5	0.0	0.0
14	---	---	---	1.0	0.5	0.5	0.5	0.0	0.5
15	---	---	---	1.0	0.5	0.5	0.0	0.0	0.0
16	---	---	---	2.0	1.0	1.5	0.0	0.0	0.0
17	---	---	---	2.0	1.0	1.5	0.0	0.0	0.0
18	5.5	4.5	5.0	1.0	0.0	0.5	0.5	0.0	0.0
19	6.0	4.0	5.0	0.0	0.0	0.0	1.0	0.5	0.5
20	7.0	5.5	6.0	0.0	0.0	0.0	1.0	0.0	0.5
21	5.5	4.0	5.0	0.5	0.0	0.5	1.0	0.5	0.5
22	4.5	3.0	4.0	0.5	0.0	0.0	0.5	0.0	0.5
23	3.5	2.5	3.0	0.5	0.0	0.0	1.0	0.5	0.5
24	3.0	2.0	2.5	1.0	0.0	0.5	1.0	0.5	1.0
25	2.5	0.5	1.5	0.5	0.0	0.5	1.0	0.5	1.0
26	2.5	1.5	2.0	0.5	0.0	0.5	0.5	0.0	0.5
27	2.0	1.5	1.5	0.5	0.0	0.5	1.0	0.5	0.5
28	2.0	1.5	1.5	1.0	0.0	0.5	0.5	0.5	0.5
29	1.5	1.0	1.5	0.5	0.0	0.5	0.5	0.5	0.5
30	1.5	0.5	1.0	0.5	0.0	0.0	0.5	0.5	0.5
31	---	---	---	0.0	0.0	0.0	-0.5	0.0	0.5
MONTH	---	---	---	2.0	0.0	0.5	1.0	0.0	0.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.5	0.5	0.0	0.0	0.0	4.5	1.5	4.5	16.5	14.0	15.5
2	0.5	0.0	0.5	0.0	0.0	0.0	7.0	4.5	6.0	16.0	12.0	14.5
3	0.5	0.0	0.0	0.0	0.0	0.0	8.5	5.0	6.0	12.0	9.5	10.5
4	0.5	0.0	0.5	0.0	0.0	0.0	5.5	4.0	4.5	9.5	9.0	9.0
5	3.5	0.0	0.5	0.0	0.0	0.0	6.5	2.5	4.5	11.0	8.5	10.0
6	0.0	0.0	0.0	0.0	0.0	0.0	5.5	4.5	5.0	15.0	7.5	12.0
7	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.0	3.0	16.0	12.5	14.5
8	0.0	0.0	0.0	3.0	0.0	0.0	4.5	1.0	2.5	---	---	---
9	0.0	0.0	0.0	3.0	0.0	0.0	6.0	2.0	4.0	---	---	---
10	0.0	0.0	0.0	0.0	0.0	0.0	7.0	3.5	5.5	---	---	---
11	0.0	0.0	0.0	0.0	0.0	0.0	6.5	4.5	5.0	---	---	---
12	0.5	0.0	0.0	0.0	0.0	0.0	7.0	3.0	5.0	---	---	---
13	0.0	0.0	0.0	0.5	0.0	0.0	6.5	4.0	5.0	---	---	---
14	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.5	4.5	---	---	---
15	0.5	0.0	0.0	0.0	0.0	0.0	6.0	5.5	5.5	---	---	---
16	1.0	0.0	0.0	0.0	0.0	0.0	9.5	5.0	7.0	---	---	---
17	0.5	0.0	0.0	0.0	0.0	0.0	11.5	8.5	10.0	16.5	15.5	16.0
18	0.5	0.0	0.0	0.0	0.0	0.0	13.0	9.0	11.0	19.5	15.0	17.0
19	0.0	0.0	0.0	0.0	0.0	0.0	14.5	11.5	13.0	19.0	14.5	17.0
20	0.0	0.0	0.0	0.0	0.0	0.0	13.5	7.0	10.5	14.5	12.0	13.0
21	0.0	0.0	0.0	0.5	0.0	0.0	9.5	5.0	7.5	17.5	11.5	14.5
22	0.0	0.0	0.0	0.5	0.0	0.0	9.0	7.0	8.5	20.5	17.0	18.5
23	0.0	0.0	0.0	1.0	0.0	0.5	8.5	7.5	8.0	20.5	16.5	18.5
24	0.0	0.0	0.0	1.0	0.5	0.5	9.5	7.0	8.5	19.5	17.0	18.0
25	0.0	0.0	0.0	2.0	0.0	1.0	11.5	8.0	10.0	17.5	14.5	16.0
26	0.0	0.0	0.0	3.0	0.0	1.5	11.5	10.0	11.0	16.5	13.0	15.0
27	0.0	0.0	0.0	2.5	0.0	1.0	10.5	8.5	9.0	18.0	13.5	15.5
28	0.0	0.0	0.0	3.5	0.0	1.5	11.5	7.0	9.5	19.5	15.0	17.0
29	0.0	0.0	0.0	4.5	2.0	3.0	14.5	10.0	12.5	20.0	17.5	19.0
30	---	---	---	3.5	2.5	3.0	15.5	11.5	13.5	20.5	18.5	19.5
31	---	---	---	2.5	2.0	2.5	---	---	---	20.5	19.5	20.0
MONTH	1.0	0.0	0.0	4.5	0.0	0.5	15.5	1.0	7.5	---	---	---

01097300 NASHOBA BROOK NEAR ACTON, MASS.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972.--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	17.5	18.0	17.5	16.0	17.0	21.5	19.5	20.5	23.0	17.0	20.0
2	18.5	16.0	17.5	20.5	16.5	18.0	22.0	20.0	21.0	21.0	18.0	19.5
3	20.5	16.0	18.0	21.0	19.5	20.0	21.0	20.0	20.5	21.0	16.0	18.0
4	22.0	18.0	19.5	22.5	19.5	21.0	23.0	20.5	21.5	18.0	15.5	17.0
5	19.5	18.0	18.5	20.0	17.0	18.5	22.0	19.0	20.5	19.0	16.0	17.0
6	18.0	15.5	17.0	18.0	16.0	17.0	21.0	18.5	19.5	19.0	16.5	17.5
7	18.0	16.0	17.0	17.5	16.0	16.5	19.5	18.5	19.0	18.0	16.0	17.0
8	17.5	15.5	16.0	19.0	16.5	17.5	22.0	19.0	20.0	18.5	16.0	17.0
9	18.5	14.5	16.0	20.0	17.5	18.5	20.5	19.5	20.0	18.5	17.5	18.0
10	17.5	16.0	17.0	20.5	18.5	19.5	21.5	18.5	20.0	17.5	16.0	16.5
11	15.5	13.5	14.5	22.5	19.5	20.5	21.0	18.0	19.5	17.5	15.0	16.0
12	16.0	12.5	14.0	23.0	20.0	21.5	19.0	18.0	18.5	19.0	15.5	17.0
13	17.0	14.0	15.5	22.5	21.5	22.0	21.5	18.0	19.5	17.5	16.5	17.0
14	20.5	15.5	17.5	23.5	21.0	22.0	20.0	18.5	19.5	17.5	17.0	17.0
15	21.5	18.0	19.5	24.5	22.5	23.0	20.0	18.0	19.0	17.5	15.5	16.5
16	21.0	18.5	19.5	25.5	23.5	24.5	20.0	17.5	18.5	18.0	15.5	16.5
17	20.5	18.0	19.0	25.5	24.0	24.5	18.5	17.5	18.0	19.0	16.0	17.5
18	19.0	17.5	18.0	26.0	23.5	24.5	18.5	17.5	18.0	21.5	18.5	19.5
19	17.5	16.0	16.5	25.0	23.5	24.0	22.0	18.0	19.5	20.5	18.0	19.0
20	18.0	15.5	16.5	24.0	21.5	22.5	22.0	18.0	19.5	17.5	16.0	16.5
21	20.5	17.5	18.5	22.5	21.0	21.5	21.5	18.0	20.0	16.0	15.0	15.0
22	19.5	17.0	18.0	25.0	21.0	23.0	22.5	19.0	20.5	17.0	14.5	15.5
23	17.0	15.5	16.0	24.5	22.0	23.0	22.5	19.5	21.0	15.5	13.5	14.5
24	17.5	15.5	16.5	25.5	22.0	23.5	24.0	21.0	22.5	15.0	13.5	14.0
25	17.0	15.5	16.0	23.5	21.0	22.5	25.5	20.0	22.5	16.0	14.5	15.5
26	17.0	15.5	16.0	24.0	19.0	21.0	26.0	21.0	23.5	17.0	15.5	16.0
27	20.5	15.5	17.5	25.0	18.5	21.5	24.0	20.0	21.0	19.5	16.5	18.0
28	21.5	17.0	19.0	22.5	19.5	21.0	25.0	19.5	22.0	18.5	16.0	17.0
29	22.5	18.0	20.0	23.5	20.5	22.0	24.5	18.5	21.5	16.0	15.0	15.5
30	20.5	17.0	18.0	23.0	20.5	21.5	24.5	17.0	20.5	16.0	15.5	15.5
31	---	---	---	21.0	20.0	20.5	24.0	16.5	20.0	---	---	---
4ENTH	22.5	12.5	17.5	26.0	16.0	21.0	26.0	16.5	20.0	23.0	13.5	17.0
PERIOD	26.0	0.0	9.5									

MERRIMACK RIVER BASIN

291

01100000 MERRIMACK RIVER BELOW CONCORD RIVER, AT LOWELL, MASS.
(International Hydrological Decade River Station)

LOCATION.--Lat 42°38'45", long 71°17'56", Middlesex County, at gaging station on right bank 1,100 ft downstream from Concord River at Lowell.
Samples for chemical analyses and suspended-sediment loads taken from Hunts Falls Bridge, 300 ft upstream from gage.

DRAINAGE AREA.--Total above gage, 4,635 sq mi; net above gage, 4,425 sq mi (diversions as needed from 210 sq mi for use of Boston metropolitan district and city of Worcester).

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972 (partial-record station).

Water temperatures: January 1966 to September 1967 (discontinued).

Sediment records: April 1967 to September 1972 (discontinued).

EXTREMES.--1971-72:

Sediment concentrations: Maximum daily, 228 mg/l Apr. 21; minimum daily, 1 mg/l several days during year.

Sediment discharges: Maximum daily, 22,000 tons Apr. 21; minimum daily, 4.2 tons Oct. 6.

Period of record:

Sediment concentrations: Maximum daily, 270 mg/l Feb. 13, 1970; minimum daily, 1 mg/l on several days each year.

Sediment discharges: Maximum daily, 29,000 tons Feb. 13, 1970; minimum daily, 2.0 tons July 20, 27, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED CHARGE (MGS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANG- NESE (MNG) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MNG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
DEC. 06...	3720	6.0	280	50	6.5	1.2	14	1.6	--	18
MAR. 06...	10900	6.5	280	80	5.0	1.0	13	1.3	.48	10
JUNE 12...	11600	4.8	--	--	6.0	1.7	10	.9	.60	13
SEP. 11...	2400	4.9	320	60	7.0	1.1	12	1.5	2.0	24

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE (NI) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
DEC. 06...	0	12	20	.1	--	.30	--	--	.13
MAR. 06...	0	11	22	.1	.007	.30	.76	1.5	.14
JUNE 12...	0	10	16	.1	.006	.68	1.2	2.5	.10
SEP. 11...	0	12	22	.4	.960	1.3	1.3	5.6	.20

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINIT- Y AS CACO3 (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)
DEC. 06...	21	6	15	--	72	128	6.7	--	1.0
MAR. 06...	17	8	8	--	68	120	6.6	--	--
JUNE 12...	22	11	11	--	61	91	6.7	8.5	17.5
SEP. 11...	22	2	20	0	86	131	7.7	6.3	20.0

MERRIMACK RIVER BASIN

01100000 MERRIMACK RIVER BELOW CONCORD RIVER, AT LOWELL, MASS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1610	9	39	2620	2	14	4510	6	73
2	1190	8	26	2220	4	24	4270	1	12
3	1130	10	31	2270	7	43	4270	1	12
4	1590	10	43	2240	4	24	3520	1	9.5
5	1490	3	12	2370	2	13	3200	1	8.6
6	1540	1	4.2	1810	6	29	3550	5	48
7	1430	9	35	2520	7	48	3210	4	35
8	1230	6	20	3110	7	59	3500	1	9.5
9	1010	2	5.5	2420	7	46	3350	9	81
10	554	4	6.0	2670	5	36	3930	3	32
11	1960	5	26	2490	4	27	4520	3	37
12	3170	8	68	2300	10	62	4790	3	39
13	4820	6	78	1770	9	43	5610	3	45
14	3850	10	104	2040	11	61	6060	2	33
15	3380	17	155	2540	7	48	5840	2	32
16	2620	2	14	2400	6	39	5550	3	45
17	2980	2	16	2280	6	37	6090	6	99
18	2970	4	32	2260	7	43	6070	2	33
19	2480	2	13	2160	9	52	5440	5	73
20	2330	1	6.3	1500	7	28	5210	7	98
21	2230	4	24	1510	7	29	5170	2	28
22	2080	4	22	2320	10	63	4950	2	27
23	950	3	7.7	2380	8	51	4270	10	115
24	1070	6	17	2370	6	38	4540	4	49
25	2120	5	29	1590	7	30	4620	3	37
26	2290	5	31	2530	8	55	5390	3	44
27	2260	5	31	1640	4	18	5860	2	32
28	2680	6	43	1740	5	23	5690	3	46
29	2720	4	25	3050	8	66	5860	4	63
30	2530	2	14	3500	7	66	5450	2	30
31	2220	6	36	--	--	--	4790	3	39
TOTAL	86484	--	1017.7	68620	--	1215	149120	--	1364.6

JANUARY				FEBRUARY			MARCH		
1	4050	5	55	4470	12	145	5940	11	176
2	4890	4	53	4510	6	73	6570	9	160
3	4950	2	27	4010	9	97	8330	15	337
4	5260	2	28	4950	8	107	10400	14	393
5	5290	2	29	5550	9	135	11900	23	739
6	4790	4	52	5700	11	169	11200	20	605
7	4970	4	54	6090	12	197	10400	29	814
8	4310	4	47	5560	12	180	10100	19	518
9	4030	3	32	5240	19	269	10000	18	486
10	4200	3	34	4830	7	91	9800	16	423
11	4820	3	39	4530	13	159	9080	12	294
12	5200	3	42	3820	10	103	8560	17	393
13	5730	11	170	4310	7	81	8410	11	250
14	6210	9	134	6560	10	177	8290	9	201
15	6380	5	86	8010	5	108	7900	15	320
16	6320	4	68	8920	10	241	7610	10	205
17	5770	30	467	9870	10	266	9250	3	75
18	5740	7	108	8550	9	217	14100	36	1370
19	5240	4	57	7960	8	172	20700	132	7380
20	5540	6	90	6100	7	115	24900	120	8070
21	5430	4	59	6400	7	121	23800	57	3660
22	5060	4	55	7220	6	117	21600	33	1920
23	5010	5	68	6800	4	73	25000	59	3980
24	4980	5	67	6100	5	82	31900	110	9470
25	5310	6	86	5750	7	109	31700	102	8730
26	5370	9	130	5880	9	143	27600	52	3880
27	5270	12	171	5430	6	88	23900	16	1030
28	5540	19	284	5420	3	44	21300	11	633
29	5060	9	123	5500	9	134	19000	12	616
30	4840	10	131	--	--	--	18200	9	442
31	4730	12	153	--	--	--	17700	9	430
TOTAL	160290	--	3000	174440	--	4013	475140	--	58000

HERRINACK RIVER BASIN

293

01100000 HERRINACK RIVER BELOW CONCORD RIVER, AT LOWELL, MASS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	PEAK DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17000	10	459	20500	25	1380	9800	12	318
2	17000	14	643	21400	23	1330	16900	29	1320
3	18700	17	858	23200	51	3190	18600	25	1260
4	19700	14	745	25800	50	3480	17000	30	1380
5	19400	13	681	30000	74	5990	14700	16	635
6	19700	10	505	31200	100	8420	13400	17	615
7	18100	9	440	28500	69	5380	11700	12	375
8	17100	8	369	25500	45	3100	10700	13	374
9	15900	7	301	25300	38	2600	10300	14	385
10	14300	6	232	25200	52	3540	11500	14	435
11	14000	11	414	22300	31	1870	12100	10	327
12	14500	13	509	19400	22	1150	11400	10	308
13	15100	11	444	17700	25	1190	10500	11	312
14	18200	20	983	16000	19	821	9470	11	281
15	19900	11	591	16100	13	565	7950	32	687
16	19600	22	1160	20600	23	1280	7520	4	81
17	21200	39	2180	25000	45	3040	6680	4	72
18	26100	42	2960	23500	23	1460	6570	5	89
19	30200	98	7990	20800	25	1400	6130	6	99
20	32700	130	11300	19000	16	821	6180	7	117
21	35700	229	22000	18900	14	714	6090	6	99
22	35500	202	19400	19000	14	718	6080	8	131
23	32700	78	6890	17000	11	597	6670	5	90
24	31900	80	6890	15000	12	486	7930	6	128
25	30800	68	5650	13300	13	467	8990	6	146
26	29800	60	4830	11900	11	353	11100	16	480
27	28300	55	4200	10400	8	225	11200	15	454
28	25300	36	2460	9240	8	200	10500	14	357
29	22100	39	2330	8040	9	195	9520	12	308
30	20100	42	2300	7550	2	41	8830	11	262
31	--	--	--	6780	11	201	--	--	--
TOTAL	679300	--	110720	594510	--	56204	306010	--	11975
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	PEAK DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9390	9	204	5740	13	201	3100	12	100
2	8570	9	208	4940	8	107	2030	7	38
3	7690	10	208	3670	6	59	2420	8	52
4	6440	8	139	3600	11	107	2920	9	71
5	8100	8	175	3220	10	87	3160	8	68
6	8950	14	338	3460	9	84	3430	8	74
7	7940	8	172	4640	10	125	2970	4	32
8	5220	3	42	3090	11	92	2700	6	44
9	6090	4	64	2650	10	72	1730	12	56
10	6110	3	49	2660	4	29	1710	10	46
11	5940	6	96	2700	9	66	2120	12	69
12	5760	5	78	3160	8	68	1980	10	53
13	6890	6	112	2640	6	43	2140	8	46
14	6640	7	125	2800	4	30	2100	10	57
15	6160	9	150	3140	7	59	1930	10	52
16	5700	5	70	2890	5	39	1150	8	25
17	5650	3	46	2540	4	27	911	5	12
18	5030	6	81	2410	4	26	2150	11	64
19	4510	2	24	1740	5	23	2530	5	34
20	4840	4	52	1740	5	23	2540	6	41
21	6520	9	158	2360	6	38	2120	7	40
22	6470	8	140	2380	5	32	2030	6	33
23	6790	8	147	2400	20	130	1350	6	22
24	7590	6	123	2290	11	68	1030	5	14
25	8540	10	231	1780	11	93	2760	10	75
26	10100	6	164	1170	10	32	2560	6	41
27	9270	2	50	1020	9	25	2520	2	14
28	8050	7	152	2070	12	67	2360	2	13
29	6770	4	73	2620	7	50	2090	5	28
30	6660	4	72	5350	18	260	1170	7	22
31	6010	12	195	4430	13	155	--	--	--
TOTAL	212890	--	3940	91300	--	2277	65711	--	1336

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

J043815
255062.3

MERRIMACK RIVER BASIN

01100750 MERRIMACK RIVER AT WEST NEWBURY, MASS.

LOCATION.--Lat 42°48'38", long 71°00'02", Essex County, multiple-parameter monitor at Bridge Street Bridge, 0.9 mile northwest of West Newbury.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.
Water temperatures: October 1968 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, greater than 1000 micromhos Oct. 4, 6, 7; minimum recorded, 68 micromhos Apr. 20.

pH: Maximum, 7.4 Aug. 21, 22; minimum, 6.0 several days during year.

Dissolved oxygen: Maximum, 16.2 mg/l Mar 25, 26; minimum, 2.0 mg/l Aug. 30.

Water temperatures: Maximum, 27.5°C July 18; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance: Maximum, greater than 1000 micromhos Aug. 17, 18, 20, 1970, Sept. 7, Oct. 4, 6, 7, 1971; minimum, 50 micromhos Apr. 19, 1970.

pH: Maximum, 8.6 Oct. 10, 1970; minimum, 5.4 Sept. 30, 1970.

Dissolved oxygen: Maximum, 18.2 mg/l Apr. 9, 1971; minimum, 0.1 mg/l Oct. 21, 1968, Sept. 11, 1970.

Water temperatures: Maximum, 29.5°C July 29, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	144	112	119	210	143	153	189	165	180	187	163	175
2	201	114	125	388	147	168	174	163	171	235	167	188
3	446	114	153	394	142	184	209	161	185	221	176	193
4	>1000	119	---	482	139	188	193	189	191	213	170	189
5	988	132	252	312	136	161	195	191	194	212	177	191
6	>1000	100	---	267	134	156	192	189	191	186	166	177
7	>1000	152	---	198	131	145	204	192	198	204	167	185
8	627	149	236	150	137	142	211	204	208	208	171	194
9	485	149	197	185	171	177	211	209	210	210	194	203
10	915	152	252	184	84	155	213	210	211	229	200	209
11	399	153	199	---	---	---	213	196	206	215	192	202
12	177	154	161	---	---	---	203	198	201	197	177	187
13	175	158	164	---	---	---	204	118	192	---	---	---
14	177	161	169	---	---	---	180	156	173	227	188	213
15	164	123	141	---	---	---	186	163	175	218	167	200
16	130	119	122	---	---	---	178	166	172	---	---	---
17	129	116	121	---	---	---	---	---	---	---	---	---
18	150	117	126	---	---	---	---	---	---	---	---	---
19	155	116	141	---	---	---	---	---	---	215	160	193
20	146	132	136	---	---	---	---	---	---	207	166	191
21	136	128	131	---	---	---	---	---	---	187	163	174
22	139	127	131	163	146	155	---	---	---	187	142	163
23	142	126	131	178	143	156	---	---	---	166	145	155
24	177	128	135	173	155	166	---	---	---	166	155	161
25	168	129	136	177	161	166	---	---	---	170	157	164
26	150	134	142	168	160	164	---	---	---	171	157	165
27	150	140	143	199	147	168	---	---	---	196	159	180
28	198	138	156	211	169	182	182	150	174	207	185	196
29	178	155	165	196	170	181	183	161	174	202	183	193
30	179	145	156	189	179	184	181	167	174	201	177	190
31	223	143	156	---	---	---	186	163	174	194	167	183
MONTH	>1000	100	157	---	---	---	---	---	---	235	142	186

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	187	164	176	190	152	173	107	102	105	---	---	---
2	182	165	176	212	150	190	110	106	108	---	---	---
3	185	169	178	258	191	227	111	108	110	---	---	---
4	455	174	235	278	192	240	108	102	105	75	74	74
5	300	200	252	274	190	220	103	99	100	74	71	73
6	260	218	242	238	161	175	102	99	100	---	---	---
7	267	223	234	164	147	153	106	100	103	---	---	---
8	272	195	236	177	153	164	107	102	105	---	---	---
9	211	195	205	171	163	166	106	101	104	---	---	---
10	218	204	211	164	153	158	106	100	104	76	75	75
11	219	199	210	164	154	160	112	104	107	80	74	77
12	216	206	212	161	154	158	112	100	110	84	78	81
13	216	181	202	166	155	159	112	106	108	87	81	84
14	209	172	186	161	157	159	110	104	107	87	82	85
15	202	164	180	161	156	159	105	97	100	98	85	89
16	178	158	168	169	160	166	97	92	94	95	90	92
17	178	152	161	180	166	173	93	90	91	91	81	85
18	155	137	148	179	162	168	91	81	86	81	70	78
19	154	134	141	163	132	146	81	73	77	86	82	84
20	134	125	130	132	113	121	73	68	70	87	80	81
21	129	126	128	120	100	108	---	---	---	83	80	82
22	131	129	130	111	106	109	---	---	---	88	83	86
23	138	130	135	114	104	109	---	---	---	92	87	89
24	145	138	141	102	94	98	---	---	---	94	90	92
25	190	145	165	96	89	92	---	---	---	98	91	94
26	181	171	178	90	89	89	71	70	70	101	98	99
27	177	167	172	92	89	90	72	69	70	105	101	103
28	196	164	177	95	91	93	76	70	72	109	100	107
29	201	154	176	99	94	97	76	72	74	111	108	110
30	---	---	---	100	97	99	80	72	75	119	111	114
31	---	---	---	103	100	101	---	---	---	124	115	120
MONTH	455	125	182	278	89	146	112	68	94	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	127	121	124	106	100	105	---	---	---	---	---	---
2	128	107	120	107	103	106	---	---	---	---	---	---
3	105	89	98	123	104	106	---	---	---	---	---	---
4	90	93	86	132	124	128	---	---	---	---	---	---
5	90	85	87	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	129	104	121	---	---	---	---	---	---

MERRIMACK RIVER BASIN

01100750 MERRIMACK RIVER AT WEST NEWBURY, MASS.--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.3	6.1	6.2	6.4	6.0	6.3	6.8	6.7	6.7	6.6	6.5	6.5
2	6.3	6.1	6.2	6.4	6.2	6.3	6.8	6.7	6.7	6.6	6.5	6.5
3	6.3	6.1	6.2	6.3	6.0	6.1	6.8	6.7	6.7	6.6	6.5	6.5
4	6.4	6.1	6.2	6.3	6.1	6.2	6.8	6.7	6.7	6.6	6.4	6.5
5	6.5	6.2	6.3	6.3	6.2	6.2	6.8	6.7	6.7	6.5	6.4	6.4
6	6.4	6.2	6.3	6.4	6.2	6.3	6.8	6.7	6.8	6.8	6.7	6.7
7	6.4	6.2	6.3	6.3	6.0	6.3	6.8	6.6	6.7	6.7	6.6	6.7
8	6.4	6.2	6.3	6.7	6.2	6.4	6.7	6.6	6.7	6.7	6.6	6.6
9	6.4	6.2	6.3	6.7	6.6	6.6	6.7	6.6	6.6	6.7	6.6	6.6
10	6.3	6.1	6.2	6.6	6.5	6.6	6.7	6.6	6.6	6.9	6.8	6.8
11	6.4	6.1	6.3	---	---	---	6.7	6.6	6.7	6.7	6.6	6.7
12	6.4	6.3	6.4	---	---	---	6.7	6.6	6.7	6.7	6.6	6.6
13	6.5	6.3	6.4	---	---	---	6.7	6.6	6.6	---	---	---
14	6.6	6.5	6.5	---	---	---	6.6	6.6	6.6	---	---	---
15	6.5	6.2	6.3	---	---	---	6.6	6.5	6.5	6.8	6.6	6.7
16	6.4	6.2	6.3	---	---	---	---	---	---	6.6	6.5	6.6
17	6.3	6.2	6.3	---	---	---	---	---	---	---	---	---
18	6.5	6.2	6.3	---	---	---	---	---	---	---	---	---
19	6.4	6.3	6.3	---	---	---	---	---	---	---	---	---
20	6.4	6.3	6.3	---	---	---	---	---	---	7.1	6.9	7.0
21	6.4	6.2	6.3	---	---	---	---	---	---	7.1	7.0	7.0
22	6.3	6.2	6.2	6.7	6.5	6.6	---	---	---	7.1	7.0	7.0
23	6.5	6.4	6.5	6.7	6.5	6.6	---	---	---	7.0	6.8	6.9
24	6.8	6.7	6.7	6.6	6.5	6.6	---	---	---	7.0	6.8	6.8
25	7.1	6.8	7.0	6.7	6.6	6.6	---	---	---	7.1	6.8	6.9
26	6.9	6.1	6.5	6.8	6.6	6.7	---	---	---	6.8	6.7	6.8
27	6.3	6.0	6.1	6.7	6.6	6.7	---	---	---	6.8	6.7	6.7
28	6.4	6.0	6.2	6.6	6.6	6.6	6.8	6.6	6.7	6.8	6.7	6.8
29	6.4	6.1	6.2	6.8	6.6	6.7	6.6	6.6	6.6	6.8	6.7	6.8
30	6.4	6.3	6.3	6.9	6.7	6.8	6.6	6.5	6.6	6.8	6.7	6.7
31	6.4	6.3	6.3	---	---	---	6.6	6.5	6.5	6.8	6.7	6.7
MONTH	7.1	6.0	6.3	---	---	---	---	---	---	7.1	6.4	6.7

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.8	6.7	6.7	6.8	6.8	6.8	6.6	6.5	6.5	6.6	6.5	6.5
2	6.7	6.7	6.7	6.9	6.7	6.8	6.5	6.5	6.5	6.5	6.4	6.5
3	6.7	6.6	6.6	6.7	6.5	6.6	6.5	6.5	6.5	6.5	6.4	6.4
4	6.7	6.6	6.7	6.6	6.4	6.5	6.6	6.4	6.5	7.0	6.5	6.7
5	6.7	6.6	6.7	6.5	6.5	6.5	6.5	6.4	6.4	6.8	6.7	6.7
6	6.7	6.7	6.7	6.5	6.5	6.5	6.5	6.4	6.4	6.7	6.6	6.7
7	6.7	6.7	6.7	6.5	6.4	6.5	6.5	6.4	6.4	6.6	6.6	6.6
8	6.8	6.6	6.7	6.6	6.4	6.5	6.5	6.4	6.5	6.6	6.5	6.5
9	6.8	6.7	6.8	6.5	6.4	6.4	6.5	6.5	6.5	6.6	6.5	6.5
10	6.8	6.7	6.8	6.5	6.4	6.4	6.6	6.5	6.5	6.6	6.4	6.6
11	6.8	6.7	6.7	6.5	6.4	6.4	6.6	6.5	6.5	6.5	6.4	6.5
12	6.7	6.7	6.7	6.5	6.4	6.5	6.6	6.5	6.5	6.5	6.4	6.5
13	6.7	6.7	6.7	6.6	6.5	6.6	6.7	6.6	6.7	6.7	6.5	6.5
14	6.7	6.7	6.7	6.9	6.7	6.8	6.7	6.6	6.6	6.5	6.5	6.5
15	6.8	6.6	6.7	6.8	6.8	6.8	6.6	6.6	6.6	6.5	6.5	6.5
16	6.6	6.5	6.6	6.8	6.7	6.8	6.6	6.5	6.6	6.6	6.5	6.6
17	6.6	6.5	6.5	6.7	6.7	6.7	6.5	6.5	6.5	6.5	6.4	6.5
18	6.5	6.5	6.5	6.7	6.7	6.7	6.7	6.4	6.6	6.5	6.4	6.4
19	6.6	6.5	6.6	6.7	6.6	6.6	6.5	6.4	6.5	6.4	6.3	6.4
20	6.6	6.6	6.6	6.6	6.5	6.5	6.4	6.3	6.4	6.4	6.3	6.4
21	6.6	6.5	6.6	6.6	6.5	6.5	6.4	6.3	6.4	6.5	6.3	6.4
22	6.6	6.5	6.6	6.6	6.4	6.5	6.4	6.3	6.4	6.5	6.4	6.5
23	6.6	6.6	6.6	6.6	6.5	6.5	6.4	6.3	6.3	6.5	6.3	6.4
24	6.6	6.6	6.6	6.5	6.4	6.5	6.4	6.3	6.4	---	---	---
25	6.7	6.6	6.7	6.4	6.3	6.3	6.4	6.3	6.3	---	---	---
26	6.7	6.6	6.6	6.4	6.3	6.3	6.5	6.2	6.4	---	---	---
27	6.7	6.6	6.7	6.4	6.3	6.4	6.4	6.3	6.4	---	---	---
28	6.7	6.7	6.7	6.5	6.4	6.5	6.5	6.4	6.4	---	---	---
29	6.8	6.7	6.7	6.5	6.5	6.5	6.5	6.4	6.5	---	---	---
30	---	---	---	6.5	6.5	6.5	6.6	6.4	6.5	6.7	6.5	6.6
31	---	---	---	6.5	6.4	6.5	---	---	---	6.5	6.4	6.4
MONTH	6.8	6.5	6.7	6.9	6.3	6.5	6.7	6.2	6.5	7.0	6.3	6.5

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

HERRINACK RIVER BASIN

01100750 MERRIMACK RIVER AT WEST NEWBURY, MASS.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.6	13.5	14.0	13.5	12.1	12.8	14.9	14.4	14.7	---	---	---
2	14.4	13.3	13.9	13.8	12.7	13.3	14.6	14.3	14.5	---	---	---
3	14.2	12.5	13.4	13.7	12.0	13.3	14.4	14.3	14.3	---	---	---
4	13.7	12.4	13.1	13.9	13.4	13.7	14.8	14.1	14.5	---	---	---
5	14.3	13.5	13.9	14.9	13.7	13.9	15.2	14.8	15.0	---	---	---
6	14.3	13.5	13.9	15.3	14.9	15.1	14.9	14.6	14.8	---	---	---
7	14.5	14.0	14.2	15.2	14.7	15.0	14.8	14.5	14.6	---	---	---
8	13.0	13.6	13.8	14.0	14.7	14.7	14.7	14.5	14.7	---	---	---
9	13.8	13.3	13.6	15.5	14.9	15.3	14.7	14.5	14.6	---	---	---
10	13.7	13.1	13.4	15.5	14.5	14.8	14.5	14.1	14.4	---	---	---
11	13.6	12.8	13.2	14.7	13.9	14.5	14.0	13.6	13.9	---	---	---
12	13.5	12.4	12.9	14.7	14.0	14.4	13.8	13.6	13.7	---	---	---
13	13.0	11.8	12.4	14.7	14.2	14.5	13.9	13.1	13.6	---	---	---
14	13.4	11.9	12.8	14.5	13.9	14.3	14.1	13.7	13.9	---	---	---
15	14.7	12.7	13.4	14.3	13.9	14.1	14.3	14.0	14.2	---	---	---
16	14.9	14.1	14.5	14.2	13.7	14.0	14.2	14.0	14.1	---	---	---
17	15.0	14.6	14.8	14.0	13.4	13.6	13.9	13.5	13.7	---	---	---
18	15.4	14.9	15.1	14.1	13.5	13.9	13.9	13.3	13.7	---	---	---
19	15.1	14.4	14.7	14.7	14.1	14.5	13.9	13.6	13.8	---	---	---
20	15.5	14.7	15.2	14.9	14.3	14.6	14.3	13.8	14.1	---	---	---
21	15.3	14.4	15.0	15.5	14.5	15.1	14.6	14.3	14.4	---	---	---
22	14.8	13.3	14.3	15.3	14.6	15.0	14.6	13.2	14.3	---	---	---
23	15.0	12.0	13.9	15.5	14.6	15.0	14.4	14.1	14.3	---	---	---
24	14.3	13.7	14.0	15.9	15.5	15.7	14.3	14.0	14.2	---	---	---
25	14.4	13.7	14.1	16.2	15.9	16.1	14.3	14.0	14.2	---	---	---
26	14.2	13.7	14.0	16.2	15.9	16.0	---	---	---	---	---	---
27	14.3	13.7	14.0	15.9	15.7	15.8	---	---	---	---	---	---
28	14.1	13.2	13.6	15.8	15.5	15.6	---	---	---	---	---	---
29	13.1	12.4	12.9	15.4	15.1	15.3	---	---	---	---	---	---
30	---	---	---	15.2	15.0	15.1	---	---	---	---	---	---
31	---	---	---	15.0	14.8	14.9	---	---	---	---	---	---
MONTH	15.5	11.8	13.9	16.2	12.1	14.6	15.2	13.1	14.2	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.5	6.8	7.2	7.1	5.6	6.3	5.5	4.5	5.0
2	---	---	---	7.9	6.9	7.4	7.0	5.6	6.2	5.8	3.9	4.8
3	---	---	---	7.7	7.2	7.5	6.6	4.8	5.5	5.1	3.5	4.4
4	---	---	---	7.5	6.6	6.9	6.1	4.4	5.3	5.8	4.2	4.8
5	---	---	---	---	---	---	6.6	4.6	5.6	6.1	4.6	5.5
6	---	---	---	---	---	---	7.0	5.2	6.0	---	---	---
7	---	---	---	---	---	---	6.8	5.4	5.9	5.7	4.4	5.1
8	8.2	7.6	7.9	8.2	7.4	7.9	6.8	5.4	5.9	5.4	4.2	4.7
9	8.2	7.7	7.9	7.9	6.2	7.0	6.1	4.8	5.6	5.6	4.0	4.7
10	8.2	7.5	7.9	7.9	6.6	7.4	6.2	4.1	5.5	4.9	3.2	4.2
11	---	---	---	---	---	---	5.9	3.6	5.2	5.0	2.6	4.1
12	8.7	7.9	8.4	8.0	6.5	7.2	7.2	4.6	5.8	5.5	3.6	4.5
13	8.8	8.3	8.7	8.1	6.6	7.3	7.1	5.1	6.2	6.1	4.4	5.1
14	8.6	7.3	8.2	7.5	6.1	6.8	8.0	5.4	6.6	5.8	3.4	4.6
15	8.2	7.6	8.0	7.4	5.5	6.5	8.0	5.9	6.9	4.7	3.5	4.0
16	8.1	7.4	7.7	7.5	5.7	6.6	8.5	5.7	6.7	4.8	2.7	3.8
17	7.6	6.9	7.3	7.2	5.7	6.5	8.2	6.1	6.8	6.2	3.6	4.9
18	7.3	6.3	6.9	7.3	6.0	6.8	7.5	5.7	6.4	7.4	4.4	5.9
19	7.2	6.0	6.6	6.9	5.3	6.2	6.4	5.0	5.5	8.3	5.6	7.0
20	7.4	6.7	7.1	6.4	5.0	5.6	7.6	4.5	6.0	7.7	4.2	5.9
21	7.1	5.9	6.6	6.2	4.0	5.1	9.0	6.0	7.5	5.9	3.0	4.6
22	7.0	5.8	6.2	6.0	4.1	5.1	9.0	6.5	8.3	5.8	4.0	5.1
23	7.1	5.7	6.3	---	---	---	8.9	6.6	7.9	5.5	3.2	4.3
24	7.3	5.4	6.3	---	---	---	8.6	5.9	7.3	5.5	3.0	4.4
25	7.5	5.9	6.7	---	---	---	8.5	5.3	7.1	5.4	3.5	4.4
26	8.0	6.8	7.4	---	---	---	8.2	4.9	6.6	5.4	3.6	4.4
27	8.3	7.4	7.9	6.8	5.6	6.1	8.0	4.0	6.0	4.9	3.3	4.2
28	8.3	7.5	7.9	7.0	6.2	6.5	6.8	2.7	4.7	5.2	3.2	4.3
29	8.1	7.5	7.9	7.1	6.1	6.5	6.6	2.6	4.1	6.0	3.8	5.0
30	7.9	7.4	7.7	7.0	5.7	6.3	7.7	2.1	4.2	5.1	3.4	4.4
31	7.6	7.0	7.3	7.3	5.7	6.3	4.3	2.0	3.0	4.4	2.7	3.5
32	---	---	---	7.4	6.5	6.8	---	---	---	---	---	---
MONTH	---	---	---	8.2	4.0	6.7	9.0	2.0	6.0	8.3	2.6	4.7
YEAR	16.2	2.0	10.0									

HERRIMACK RIVER BASIN

299

01100750 HERRIMACK RIVER AT WEST NEWBURY, MASS.—Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	18.5	19.0	15.5	14.0	14.5	1.5	0.0	0.5	0.5	0.0	0.0
2	19.5	18.0	19.0	15.5	14.5	15.0	0.0	0.0	0.0	0.5	0.0	0.5
3	19.5	18.5	19.0	15.5	15.0	15.0	0.0	0.0	0.0	0.5	0.0	0.5
4	18.5	17.5	18.0	15.0	14.0	14.5	0.0	0.0	0.0	1.0	0.5	0.5
5	19.0	17.0	18.0	14.0	12.5	13.5	0.0	0.0	0.0	0.5	0.5	0.5
6	18.5	18.0	18.5	13.0	12.0	12.5	0.0	0.0	0.0	0.5	0.0	0.5
7	18.0	17.0	17.5	12.5	11.5	12.0	0.0	0.0	0.0	0.5	0.0	0.5
8	17.5	16.5	17.0	11.5	10.0	11.0	0.0	0.0	0.0	0.5	0.0	0.0
9	16.5	16.0	16.5	10.5	9.5	10.0	0.0	0.0	0.0	0.5	0.0	0.5
10	16.5	16.0	16.0	10.0	9.0	9.5	0.5	0.0	0.0	1.0	0.0	0.5
11	16.5	15.5	16.0	---	---	---	1.0	0.0	0.5	1.0	0.5	0.5
12	16.5	15.5	16.0	---	---	---	2.0	0.5	1.5	1.5	1.0	1.0
13	15.5	14.5	15.0	---	---	---	2.0	0.0	1.5	---	---	---
14	16.0	15.0	15.5	---	---	---	2.0	0.5	1.5	2.0	0.5	1.5
15	16.5	15.5	16.0	---	---	---	1.5	0.0	0.5	1.0	0.0	0.5
16	16.5	16.0	16.5	---	---	---	2.0	1.5	1.5	---	---	---
17	16.5	15.0	15.5	---	---	---	---	---	---	---	---	---
18	15.0	14.0	14.5	---	---	---	---	---	---	---	---	---
19	14.5	13.5	14.0	---	---	---	---	---	---	---	---	---
20	14.5	13.5	14.0	---	---	---	---	---	---	0.5	0.0	0.0
21	15.0	13.5	14.0	---	---	---	---	---	---	0.5	0.0	0.5
22	15.5	14.0	14.5	6.5	4.5	5.5	---	---	---	0.5	0.0	0.5
23	15.5	14.5	15.0	4.5	3.5	4.0	---	---	---	1.0	0.5	1.0
24	15.0	14.0	14.5	4.0	3.0	3.5	---	---	---	1.5	0.5	1.0
25	14.0	13.5	14.0	3.5	2.0	3.0	---	---	---	1.0	0.5	1.0
26	15.0	13.5	14.0	2.5	1.0	2.0	---	---	---	0.5	0.0	0.0
27	15.5	14.0	15.0	3.0	1.5	2.5	---	---	---	0.0	0.0	0.0
28	16.0	15.0	15.5	3.5	2.5	3.0	1.0	0.5	1.0	0.0	0.0	0.0
29	16.5	15.5	16.0	3.0	2.0	2.5	1.0	0.5	0.5	0.0	0.0	0.0
30	16.0	15.0	15.5	2.5	1.5	2.0	1.0	0.0	0.5	0.0	0.0	0.0
31	15.5	14.0	14.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	19.5	13.5	16.0	---	---	---	---	---	---	2.0	0.0	0.5

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.5	0.5	1.0	4.0	3.0	3.5	11.0	10.0	10.5
2	0.0	0.0	0.0	1.5	0.5	1.0	4.5	3.5	4.0	10.5	10.0	10.0
3	0.0	0.0	0.0	1.0	1.0	1.0	4.5	4.0	4.5	10.0	9.5	10.0
4	0.5	0.0	0.0	2.0	1.0	1.5	4.5	4.0	4.0	9.5	9.0	9.5
5	0.0	0.0	0.0	1.5	0.5	1.0	4.0	3.5	3.5	9.0	8.5	9.0
6	0.0	0.0	0.0	1.0	0.5	1.0	4.0	3.5	4.0	9.0	8.0	8.5
7	0.5	0.5	0.5	1.5	0.0	1.0	4.0	3.0	3.5	9.5	8.5	9.0
8	0.5	0.5	0.5	1.5	1.0	1.5	4.0	3.0	3.5	9.5	9.5	9.5
9	1.0	0.5	0.5	1.5	0.5	1.0	4.0	3.0	3.5	10.0	9.0	9.5
10	0.5	0.5	0.5	2.0	0.5	1.0	5.0	3.5	4.0	10.0	9.0	9.5
11	0.5	0.5	0.5	2.5	0.5	1.5	4.5	4.5	4.5	10.0	9.5	9.5
12	0.5	0.5	0.5	2.5	1.5	2.0	5.5	4.5	5.0	10.0	9.5	9.5
13	0.5	0.5	0.5	2.5	2.0	2.0	5.5	5.0	5.0	11.5	9.5	10.5
14	0.5	0.5	0.5	2.0	1.5	1.5	5.0	5.0	5.0	12.5	11.0	11.5
15	1.0	0.5	0.5	1.5	0.5	1.0	5.0	4.5	4.5	13.0	12.0	12.5
16	1.5	0.5	0.5	2.5	1.0	1.5	5.0	4.5	5.0	13.5	13.0	13.5
17	1.5	0.5	1.0	2.5	1.5	2.0	6.5	5.0	5.5	14.0	13.5	13.5
18	1.5	1.0	1.5	3.0	2.0	2.5	7.5	6.0	7.0	15.0	14.0	14.0
19	1.5	0.0	0.5	3.0	2.0	2.5	8.0	7.0	7.5	14.5	14.0	14.0
20	0.0	0.0	0.0	2.0	1.5	1.5	7.5	6.5	7.0	14.0	13.5	14.0
21	0.0	0.0	0.0	2.0	1.0	1.5	7.0	6.0	6.5	15.0	13.5	14.0
22	0.0	0.0	0.0	2.5	1.5	2.0	6.5	6.0	6.0	16.0	14.5	15.5
23	0.5	0.0	0.0	2.5	2.0	2.5	6.5	6.0	6.0	17.5	15.5	16.5
24	0.5	0.0	0.0	2.0	1.5	2.0	7.0	6.0	6.5	17.5	16.5	17.0
25	0.5	0.0	0.5	2.0	1.5	1.5	10.0	6.5	8.0	18.0	16.5	17.0
26	0.5	0.5	0.5	2.0	1.0	1.5	8.0	7.0	7.5	18.0	16.5	17.5
27	0.5	0.0	0.5	2.0	1.5	1.5	8.0	7.5	7.5	18.5	17.0	17.5
28	0.5	0.5	0.5	2.0	1.0	2.0	8.5	7.5	8.0	19.5	17.0	18.5
29	1.0	0.5	0.5	3.0	2.0	2.5	9.5	8.0	8.5	20.5	18.0	19.0
30	---	---	---	3.0	2.5	3.0	10.5	8.5	9.5	20.5	19.0	20.0
31	---	---	---	3.5	3.0	3.0	---	---	---	21.0	20.0	20.5
MONTH	1.5	0.0	0.5	3.5	0.0	1.5	10.5	3.0	5.5	21.0	8.0	13.5

01100750 HERRINACK RIVER AT WEST NEWBURY, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

BLACKSTONE RIVER BASIN

301

0111230 BLACKSTONE RIVER AT MILLVILLE, MASS.

LOCATION.--Lat 42°01'16", long 71°34'04", Worcester County, multiple-parameter monitor on left bank 400 ft above railroad bridge, 0.8 mile southeast of Millville, and 1.4 miles upstream from Branch River.

DRAINAGE AREA.--277 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.
Water temperatures: July 1969 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, 898 micromhos Mar. 29; minimum, 105 micromhos Apr. 4.

pH: Maximum, 7.4 Sept. 29; minimum, 5.6 Oct. 19.

Dissolved oxygen: Maximum, 14.8 mg/l Feb. 13; minimum, 0.7 mg/l Oct. 3, 6, 7.

Water temperatures: Maximum, 28.0°C July 19; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance: Maximum, 898 micromhos Mar. 29, 1972; minimum, 105 micromhos Apr. 4, 1971.

pH: Maximum, 8.1 July 9, 1970; minimum, 5.5 Sept. 9, 1970.

Dissolved oxygen: Maximum, 14.9 mg/l Feb. 25, 1971; minimum, 0.0 mg/l July 12, 15-20, 26-30, Aug. 2, 3, 1971.

Water temperatures: Maximum, 29.0°C July 29, 1970; minimum, freezing point on many days during winter period.

REMARKS.--Figures of daily discharge, computed on basis of records for gaging station at Woonsocket and for Branch River at Forestdale, are available at district office. Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	340	314	337	359	348	352	278	203	253	295	254	276
2	389	335	365	375	320	348	297	292	295	299	256	282
3	390	358	363	387	315	354	310	298	304	574	247	363
4	370	357	364	309	266	278	313	303	309	476	317	386
5	399	367	384	318	273	290	324	305	316	312	291	298
6	387	378	382	319	296	307	313	293	304	377	286	314
7	382	350	365	333	314	327	504	271	307	377	290	330
8	430	387	417	386	333	365	526	307	402	289	277	283
9	424	393	413	382	319	355	303	272	280	314	286	300
10	387	297	339	369	300	328	279	271	274	425	273	321
11	401	213	263	378	362	371	280	274	277	318	250	275
12	262	207	229	375	327	354	276	253	265	254	238	245
13	287	260	273	376	361	360	256	247	252	246	233	240
14	315	286	294	378	339	357	263	246	253	247	230	238
15	333	309	314	362	343	354	277	260	265	247	233	239
16	350	332	342	345	336	340	298	274	288	252	234	242
17	360	310	343	353	326	335	270	261	267	281	239	255
18	322	305	311	368	354	360	261	245	253	290	274	281
19	357	323	344	350	346	353	243	232	238	296	284	291
20	348	322	342	363	343	352	244	234	238	295	280	288
21	388	320	366	383	345	367	245	237	241	283	263	271
22	425	364	396	397	381	390	---	---	---	465	272	347
23	376	314	347	366	364	380	---	---	---	483	352	432
24	326	315	322	383	361	370	---	---	---	346	280	304
25	319	307	315	373	320	342	---	---	---	311	287	297
26	358	324	344	343	324	332	---	---	---	287	269	277
27	333	327	330	354	344	348	288	247	242	290	273	283
28	---	---	---	411	321	339	288	256	270	314	288	298
29	---	---	---	466	427	452	285	259	277	316	288	302
30	---	---	---	420	233	347	280	254	266	395	303	355
31	---	---	---	---	---	---	255	247	252	381	279	328
MONTH	430	207	342	466	233	351	526	203	277	574	230	298

BLACKSTONE RIVER BASIN

0111230 BLACKSTONE RIVER AT MILLVILLE, MASS. ---Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	320	202	308	442	372	406	179	150	165	202	180	190
2	375	315	345	418	343	382	146	116	130	197	178	186
3	511	305	377	334	166	216	131	125	116	198	162	181
4	404	245	279	172	161	166	215	105	160	155	114	132
5	---	---	---	194	173	185	233	193	210	135	122	130
6	411	260	335	224	194	205	207	192	200	142	132	139
7	337	264	281	204	190	199	214	199	206	144	139	142
8	441	198	305	222	189	203	226	207	218	160	143	152
9	648	444	491	228	188	206	239	217	228	184	142	161
10	737	336	422	200	189	193	247	228	239	149	142	141
11	778	311	396	207	189	195	265	243	253	157	145	154
12	760	312	371	166	199	193	262	228	242	172	155	165
13	402	276	344	200	188	194	233	213	226	177	164	172
14	361	259	297	273	189	210	238	190	207	178	170	174
15	277	222	259	364	228	336	211	193	205	174	143	162
16	---	---	---	406	227	352	208	200	206	158	141	153
17	---	---	---	240	221	247	213	186	199	165	156	161
18	---	---	---	217	167	187	211	184	201	176	160	169
19	---	---	---	184	177	181	215	201	208	183	168	176
20	---	---	---	190	182	185	209	189	200	185	171	180
21	---	---	---	188	169	178	197	170	177	182	152	165
22	242	238	240	186	157	171	189	173	183	171	157	166
23	256	242	248	159	140	147	183	154	173	167	170	180
24	291	260	267	158	147	153	171	155	164	194	173	185
25	269	249	260	161	156	169	178	165	175	195	183	190
26	375	273	328	---	---	---	187	173	181	213	193	202
27	311	275	294	---	---	---	200	180	191	207	194	201
28	319	240	301	675	183	270	205	191	199	213	205	209
29	415	294	371	898	269	407	209	200	204	206	202	204
30	---	---	---	220	192	203	216	202	207	215	203	206
31	---	---	---	183	170	177	---	---	---	211	194	207
MONTH	---	---	---	898	140	225	265	195	196	215	114	173
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	192	126	156	---	---	---	249	238	242	344	306	320
2	153	131	146	---	---	---	276	248	267	329	318	323
3	167	150	160	---	---	---	273	245	259	327	277	308
4	169	158	163	---	---	---	294	265	275	346	191	240
5	171	146	156	192	187	191	292	277	283	213	186	197
6	167	158	163	218	192	203	288	279	284	253	213	232
7	183	159	169	210	179	203	308	279	293	304	253	268
8	187	163	175	232	204	208	298	266	280	312	302	307
9	188	167	178	235	205	218	311	248	293	314	298	305
10	173	142	156	208	186	194	311	241	277	367	312	341
11	151	143	149	228	203	215	309	294	302	368	258	308
12	159	148	154	231	221	228	304	286	302	272	256	262
13	176	159	169	237	211	227	359	320	336	297	270	289
14	187	169	178	239	206	219	328	306	320	332	296	322
15	195	176	185	216	202	207	354	267	315	342	314	330
16	196	194	191	224	219	221	256	209	223	316	262	297
17	195	179	189	232	220	226	266	233	254	287	255	268
18	182	168	172	237	226	230	279	260	272	280	266	273
19	171	153	161	257	232	246	309	270	282	281	234	258
20	174	142	156	264	183	215	312	282	293	284	199	234
21	164	146	155	208	184	197	294	283	287	215	200	206
22	164	152	158	223	208	215	305	285	290	245	214	237
23	168	147	154	233	223	227	301	282	289	263	242	253
24	165	149	157	235	223	229	315	295	309	273	238	253
25	164	157	159	228	209	219	319	305	314	265	253	257
26	163	122	140	265	191	223	329	313	321	263	242	249
27	178	158	168	211	188	198	319	313	317	294	249	266
28	178	167	171	234	214	224	331	316	323	297	280	291
29	---	---	---	292	228	244	332	294	317	293	240	270
30	---	---	---	252	240	247	291	255	268	293	267	277
31	---	---	---	255	247	251	311	264	297	---	---	---
MONTH	196	122	165	265	183	219	359	299	290	368	186	275
YEAR	898	105	260									

BLACKSTONE RIVER BASIN

303

01111230 BLACKSTONE RIVER AT MILLVILLE, MASS.--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.8	6.4	6.5	---	---	---	---	---	---	6.7	6.5	6.6
2	6.8	6.5	6.5	---	---	---	6.9	6.4	6.6	6.7	6.5	6.6
3	6.8	6.4	6.7	---	---	---	6.6	6.4	6.5	6.7	6.5	6.6
4	6.9	6.2	6.5	---	---	---	6.7	6.5	6.6	6.5	6.4	6.5
5	6.9	6.8	6.9	---	---	---	6.7	6.4	6.6	6.8	6.4	6.6
6	6.9	6.7	6.8	---	---	---	6.7	6.4	6.6	6.7	6.5	6.6
7	6.7	6.9	6.5	---	---	---	6.8	6.5	6.7	6.7	6.5	6.6
8	7.1	6.3	6.5	---	---	---	6.9	6.4	6.5	6.7	6.5	6.6
9	7.0	6.8	6.7	---	---	---	6.6	6.4	6.5	6.7	6.5	6.6
10	6.7	6.3	6.5	---	---	---	6.6	6.5	6.6	6.8	6.5	6.7
11	7.0	6.3	6.7	---	---	---	6.7	6.5	6.6	6.6	6.5	6.5
12	6.9	6.3	6.6	---	---	---	6.7	6.5	6.6	6.6	6.3	6.5
13	6.6	6.0	6.3	---	---	---	6.7	6.5	6.6	6.6	6.4	6.5
14	6.6	6.1	6.3	---	---	---	6.7	6.5	6.6	6.5	6.3	6.4
15	6.3	6.2	6.3	---	---	---	6.8	6.7	6.7	6.5	6.4	6.4
16	6.5	6.1	6.3	---	---	---	6.8	6.6	6.7	6.5	6.3	6.4
17	6.6	6.0	6.3	---	---	---	6.6	6.5	6.6	6.8	6.4	6.5
18	6.9	6.8	6.4	---	---	---	6.6	6.4	6.5	6.7	6.5	6.6
19	6.8	6.6	6.3	---	---	---	6.6	6.1	6.5	6.7	6.5	6.6
20	6.9	6.1	6.5	---	---	---	6.7	6.6	6.6	6.7	6.6	6.6
21	7.3	6.2	6.7	---	---	---	6.7	6.6	6.6	6.7	6.6	6.7
22	7.1	6.7	6.9	---	---	---	---	---	---	6.7	6.5	6.6
23	7.1	6.7	6.7	---	---	---	---	---	---	6.8	6.6	6.7
24	6.9	6.8	6.3	---	---	---	---	---	---	6.9	6.7	6.8
25	7.0	6.8	6.9	---	---	---	---	---	---	6.9	6.6	6.8
26	7.0	6.8	6.9	---	---	---	---	---	---	6.9	6.5	6.7
27	6.9	6.7	6.8	---	---	---	7.0	6.7	6.7	6.6	6.5	6.5
28	---	---	---	---	---	---	6.8	6.2	6.7	7.2	6.5	6.6
29	---	---	---	---	---	---	6.7	6.4	6.6	6.6	6.3	6.5
30	---	---	---	---	---	---	6.6	6.5	6.6	6.7	6.5	6.6
31	---	---	---	---	---	---	6.7	6.6	6.6	6.9	6.5	6.6
MONTH	7.3	6.6	6.6	---	---	---	7.0	6.1	6.6	7.2	6.3	6.6

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.7	6.5	6.6	---	---	---	6.8	6.5	6.7	6.9	6.6	6.7
2	6.6	6.5	6.6	---	---	---	6.7	6.5	6.6	6.6	6.3	6.3
3	6.6	6.5	6.6	---	---	---	6.8	6.6	6.7	6.5	6.3	6.4
4	6.6	6.4	6.5	---	---	---	7.0	6.8	6.8	6.3	6.1	6.2
5	---	---	---	---	---	---	6.8	6.6	6.7	6.3	6.1	6.2
6	---	---	---	---	---	---	6.8	6.6	6.7	6.6	6.2	6.4
7	---	---	---	---	---	---	6.7	6.6	6.6	6.6	6.3	6.4
8	---	---	---	---	---	---	6.8	6.6	6.7	6.6	6.5	6.5
9	---	---	---	---	---	---	6.7	6.6	6.6	6.6	6.2	6.4
10	---	---	---	---	---	---	6.9	6.5	6.6	6.2	6.1	6.1
11	---	---	---	---	---	---	6.8	6.6	6.7	6.3	6.1	6.2
12	---	---	---	---	---	---	6.7	6.5	6.6	6.3	6.1	6.2
13	---	---	---	---	---	---	---	---	---	6.4	6.1	6.3
14	6.8	6.6	6.7	---	---	---	---	---	---	6.3	6.2	6.3
15	6.8	6.7	6.8	---	---	---	---	---	---	6.2	6.0	6.2
16	---	---	---	---	---	---	---	---	---	6.3	6.0	6.1
17	---	---	---	---	---	---	---	---	---	6.8	6.1	6.4
18	---	---	---	---	---	---	6.8	6.5	6.6	6.8	6.4	6.6
19	---	---	---	---	---	---	6.5	6.2	6.4	6.7	6.6	6.6
20	---	---	---	---	---	---	6.3	6.2	6.3	6.7	6.6	6.6
21	---	---	---	6.8	6.6	6.7	6.5	6.2	6.4	6.7	6.5	6.7
22	6.9	6.5	6.7	6.7	6.6	6.6	6.6	6.4	6.5	6.8	6.5	6.6
23	6.7	6.5	6.6	6.6	6.4	6.4	6.7	6.5	6.6	6.9	6.4	6.6
24	6.8	6.5	6.6	6.5	6.4	6.5	6.6	6.4	6.5	6.7	6.5	6.6
25	6.7	6.4	6.5	6.5	6.4	6.5	6.7	6.4	6.6	6.8	6.5	6.7
26	6.6	6.5	6.6	---	---	---	6.5	6.1	6.4	6.8	6.4	6.6
27	6.7	6.5	6.6	---	---	---	6.5	6.3	6.3	6.9	6.5	6.7
28	6.6	6.6	6.6	6.8	6.7	6.8	6.6	6.3	6.5	6.9	6.5	6.7
29	---	---	---	6.8	6.6	6.7	6.7	6.4	6.5	7.0	6.6	6.8
30	---	---	---	6.7	6.4	6.6	6.8	6.4	6.6	6.9	6.4	6.7
31	---	---	---	6.6	6.5	6.6	---	---	---	6.6	6.4	6.5
MONTH	---	---	---	---	---	---	7.0	6.1	6.6	7.0	6.0	6.5

BLACKSTONE RIVER BASIN

01111230 BLACKSTONE RIVER AT MILLVILLE, MASS.--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.4	6.1	6.3	---	---	---	6.7	6.1	6.4	6.4	6.1	6.2
2	6.4	6.1	6.3	---	---	---	6.7	6.3	6.5	6.5	6.0	6.3
3	6.4	6.3	6.4	---	---	---	6.6	6.3	6.4	6.5	6.2	6.4
4	6.6	6.2	6.4	---	---	---	6.7	6.1	6.5	6.4	6.2	6.4
5	6.4	6.2	6.3	6.8	6.6	6.7	6.7	6.3	6.4	6.4	6.1	6.2
6	6.6	6.0	6.3	6.9	6.2	6.7	6.8	6.4	6.6	6.4	6.2	6.3
7	6.5	6.2	6.4	6.9	6.4	6.7	6.6	6.2	6.4	---	---	---
8	6.4	6.0	6.3	6.8	6.6	6.7	6.5	6.2	6.4	---	---	---
9	6.7	6.4	6.5	7.0	6.4	6.7	6.5	6.3	6.4	---	---	---
10	6.5	6.3	6.4	6.8	6.3	6.6	6.3	6.0	6.1	---	---	---
11	6.6	6.3	6.4	6.8	6.6	6.7	6.5	6.0	6.2	---	---	---
12	6.6	6.1	6.4	6.9	6.7	6.7	7.0	6.1	6.4	---	---	---
13	6.6	6.2	6.5	7.0	6.5	6.7	7.0	6.4	6.7	---	---	---
14	6.6	6.3	6.5	7.0	6.5	6.7	6.6	6.0	6.3	---	---	---
15	6.8	6.5	6.6	6.9	6.5	6.7	6.8	6.1	6.5	6.8	6.5	6.6
16	6.8	6.3	6.7	7.0	6.5	6.7	6.6	6.2	6.4	6.7	6.2	6.5
17	6.8	6.6	6.7	6.8	6.3	6.5	6.4	6.1	6.3	6.6	6.3	6.4
18	6.8	6.6	6.7	6.6	6.2	6.4	6.8	6.2	6.4	6.7	6.2	6.5
19	6.8	6.7	6.7	7.0	6.3	6.5	6.5	6.1	6.3	6.9	6.5	6.6
20	6.8	6.4	6.7	6.5	6.4	6.4	6.5	6.1	6.3	7.1	6.5	6.7
21	6.6	6.0	6.4	6.6	6.3	6.5	6.8	6.1	6.3	7.0	6.7	6.9
22	6.5	6.4	6.4	6.9	6.4	6.5	6.6	6.0	6.3	6.9	6.5	6.6
23	6.5	6.1	6.4	6.6	6.4	6.5	6.6	6.0	6.6	7.2	6.5	6.9
24	6.6	6.1	6.5	6.7	6.1	6.5	6.6	6.3	6.4	7.1	6.2	6.6
25	6.6	6.2	6.5	6.8	6.4	6.7	6.6	6.3	6.4	6.8	6.3	6.6
26	6.6	6.0	6.4	6.7	6.4	6.5	6.4	6.3	6.4	6.9	6.4	6.7
27	6.7	6.5	6.6	6.7	6.0	6.5	6.4	6.3	6.4	7.1	6.7	6.9
28	6.7	6.4	6.5	6.7	6.2	6.5	6.5	6.3	6.4	7.1	6.5	6.9
29	---	---	---	6.7	6.3	6.5	6.4	6.2	6.4	7.4	6.4	6.9
30	---	---	---	6.7	6.2	6.4	6.4	6.0	6.3	6.7	6.3	6.5
31	---	---	---	6.7	6.1	6.4	6.5	6.0	6.2	---	---	---
MONTH	6.8	6.0	6.5	7.0	6.0	6.6	7.0	6.0	6.4	---	---	---
YEAR	7.4	5.6	6.5									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.5	0.9	2.3	3.7	1.6	2.8	13.8	11.8	12.8	12.0	11.5	11.8
2	3.4	0.9	1.8	1.9	1.2	1.5	12.2	12.1	12.2	12.0	11.6	11.7
3	3.4	0.7	1.7	2.0	1.3	1.6	12.5	12.0	12.3	11.7	11.1	11.5
4	4.0	0.9	2.1	3.0	1.4	2.2	11.9	11.7	11.8	12.0	11.4	11.7
5	3.4	0.8	1.8	4.4	2.3	3.3	11.8	11.6	11.7	11.8	11.5	11.6
6	2.1	0.7	1.1	5.2	3.1	3.9	12.0	11.7	11.9	12.5	11.7	12.2
7	3.0	0.7	1.4	4.5	3.3	4.0	11.7	10.2	11.3	12.5	12.1	12.3
8	3.2	0.8	1.6	7.2	4.1	5.8	11.2	10.2	11.0	12.4	11.9	12.1
9	3.0	0.9	1.7	8.4	6.1	7.4	11.6	11.1	11.4	12.2	11.9	12.0
10	3.0	0.8	1.7	8.8	7.3	7.9	11.3	10.7	11.0	12.0	10.4	11.2
11	3.7	1.6	2.8	8.7	7.2	7.9	10.7	10.0	10.3	11.8	11.3	11.5
12	5.1	3.6	4.4	8.7	7.2	7.8	11.0	10.0	10.5	11.8	11.3	11.5
13	5.5	3.9	4.5	8.1	6.7	7.4	11.1	10.5	10.8	11.7	10.7	11.4
14	4.8	2.9	3.8	8.5	6.5	7.5	11.7	10.4	11.1	11.0	10.5	10.7
15	4.1	2.2	2.9	8.7	7.6	8.1	11.2	10.6	11.0	12.0	11.0	11.6
16	3.2	1.9	2.4	9.2	7.7	8.3	10.6	9.6	10.3	12.8	11.7	12.4
17	3.4	1.6	2.4	9.2	7.5	8.2	10.4	9.6	10.0	12.7	12.5	12.6
18	3.6	2.0	2.6	8.1	6.9	7.4	11.1	10.0	10.6	12.5	11.9	12.3
19	3.2	1.5	2.2	7.3	6.0	6.5	12.3	11.1	11.8	11.9	11.2	11.6
20	3.2	1.5	2.3	9.1	5.1	6.1	12.1	11.8	11.9	11.5	11.0	11.2
21	3.1	1.7	2.3	5.9	5.1	5.4	11.9	11.7	11.8	11.2	10.9	11.0
22	2.7	1.6	2.1	6.3	5.5	5.9	---	---	---	11.2	10.8	11.0
23	3.1	1.4	2.1	12.1	6.0	8.0	---	---	---	10.9	10.5	10.7
24	2.0	1.6	1.8	9.3	7.8	8.5	---	---	---	10.9	10.4	10.7
25	2.4	1.6	2.0	9.5	7.9	8.7	---	---	---	10.8	10.6	10.7
26	2.6	1.6	2.1	10.6	9.6	10.2	---	---	---	12.1	10.7	11.7
27	1.5	1.2	1.3	10.2	9.7	9.9	11.4	11.2	11.3	12.6	12.2	12.4
28	---	---	---	10.0	9.2	9.7	11.2	10.8	11.0	12.3	11.8	11.9
29	---	---	---	9.1	8.8	9.0	10.9	10.6	10.7	11.8	11.5	11.6
30	---	---	---	14.5	7.9	9.7	11.3	10.6	10.8	11.7	11.3	11.4
31	---	---	---	---	---	---	11.9	11.2	11.5	11.8	11.4	11.5
MONTH	5.5	0.7	2.3	14.5	1.2	6.7	13.8	9.6	11.3	12.8	10.4	11.6

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DISSOLVED OXYGEN (mg/l) IN MILLIGRAMS PER LITER												
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.1	11.8	12.0	11.1	10.6	10.8	11.2	10.4	10.5	8.5	7.5	8.0
2	11.9	11.3	11.6	11.3	10.6	10.9	10.7	10.3	10.5	7.6	7.1	7.3
3	11.6	11.3	11.4	12.3	11.3	12.0	10.8	10.4	10.6	8.3	7.1	7.8
4	12.0	10.7	11.6	12.5	11.6	12.2	10.9	10.4	10.7	8.8	7.9	8.4
5	13.6	12.1	12.7	12.6	12.2	12.4	11.2	10.3	10.6	9.1	8.6	8.9
6	13.4	12.9	13.1	12.7	12.3	12.5	10.7	10.2	10.4	9.1	8.7	8.9
7	14.4	12.4	12.7	12.8	12.4	12.6	10.7	10.2	10.5	8.9	8.3	8.6
8	14.2	12.2	12.7	12.4	12.0	12.2	11.3	10.5	10.9	8.7	8.3	8.4
9	12.5	12.2	12.3	13.0	12.3	12.7	11.1	10.4	10.8	9.1	8.7	8.9
10	14.4	12.2	13.3	12.9	12.6	12.8	11.1	10.4	10.7	9.6	9.0	9.3
11	14.2	11.9	13.1	12.8	12.5	12.6	10.7	10.1	10.4	9.4	9.0	9.1
12	14.5	13.5	14.0	12.6	12.3	12.4	10.5	9.5	10.2	9.1	8.5	8.9
13	14.8	11.7	13.5	12.4	12.0	12.2	10.1	9.5	9.8	8.8	8.2	8.5
14	14.5	10.9	11.8	12.2	11.9	12.1	10.3	8.7	9.8	8.3	8.0	8.1
15	14.7	12.1	13.8	12.4	12.2	12.3	10.2	9.4	10.0	8.3	7.8	8.0
16	---	---	---	12.4	11.5	12.0	10.4	9.3	10.0	8.1	7.5	7.8
17	---	---	---	11.7	11.3	11.5	9.6	9.0	9.3	7.5	6.7	7.2
18	---	---	---	12.0	11.7	11.9	9.3	8.5	8.9	7.2	6.7	6.9
19	---	---	---	12.4	12.0	12.2	8.6	7.6	8.2	7.0	6.5	6.7
20	---	---	---	12.4	12.0	12.2	8.9	7.5	8.1	7.5	6.9	7.2
21	---	---	---	12.1	11.6	11.9	9.8	9.0	9.5	7.8	7.0	7.5
22	12.5	12.3	12.4	11.6	11.0	11.3	9.6	9.3	9.5	7.7	6.9	7.2
23	12.6	12.3	12.5	11.0	10.0	10.7	10.0	9.5	9.8	7.2	6.6	6.9
24	12.3	11.9	12.2	10.8	8.7	9.6	10.1	9.6	9.8	6.9	6.4	6.7
25	11.9	11.6	11.7	10.2	8.9	9.5	9.7	9.1	9.4	7.3	6.4	6.8
26	---	---	---	---	---	---	9.3	8.9	9.1	7.8	6.6	7.1
27	11.9	11.5	11.7	---	---	---	9.1	8.9	9.0	7.9	6.3	7.1
28	11.7	11.3	11.5	11.8	11.5	11.6	9.5	8.5	9.1	7.8	6.1	6.8
29	11.4	10.6	11.1	11.5	11.1	11.3	8.8	8.0	8.5	7.7	5.8	6.6
30	---	---	---	11.2	10.9	11.1	8.9	7.7	8.3	7.2	5.7	6.4
31	---	---	---	11.3	11.0	11.2	---	---	---	6.5	5.3	5.8
MONTH	14.8	10.6	12.4	13.0	8.7	11.7	11.3	7.5	9.8	9.6	5.3	7.6
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.5	5.0	5.9	---	---	---	6.1	2.6	4.1	3.0	1.1	1.8
2	7.0	6.2	6.6	---	---	---	4.9	2.7	3.7	2.4	1.0	1.6
3	6.7	6.3	6.5	---	---	---	4.8	2.3	3.3	2.6	1.2	2.0
4	6.3	5.9	6.2	---	---	---	5.0	2.3	3.4	3.9	2.3	3.3
5	6.4	5.3	5.8	6.0	5.8	5.9	5.5	2.4	3.7	5.5	3.8	4.5
6	6.7	6.1	6.4	6.7	5.4	6.2	5.6	3.1	4.2	5.1	3.8	4.5
7	6.5	5.8	6.2	6.7	5.5	6.0	4.0	2.7	3.3	4.8	3.1	3.8
8	6.6	6.1	6.4	6.5	5.3	5.8	4.9	2.5	3.5	4.2	2.7	3.2
9	6.5	5.9	6.2	6.1	4.9	5.5	3.9	2.6	3.1	3.3	2.0	2.6
10	6.6	5.8	6.2	6.5	4.9	5.6	4.6	2.7	3.5	3.9	2.7	3.2
11	7.4	6.6	7.0	5.9	4.5	5.2	4.6	2.4	3.4	4.4	2.8	3.5
12	7.6	7.1	7.3	5.5	4.2	4.8	6.3	2.5	4.1	4.8	2.8	3.8
13	7.2	6.6	6.8	4.3	3.3	3.9	5.5	3.3	4.8	3.7	2.3	3.0
14	6.7	6.2	6.5	4.8	3.1	4.0	4.0	2.3	3.0	3.2	2.0	2.6
15	6.3	5.7	6.1	5.2	3.4	4.0	3.8	2.5	3.0	3.6	2.1	2.8
16	6.0	5.4	5.7	4.5	3.1	4.1	5.2	2.8	4.0	3.5	2.4	3.2
17	6.0	5.4	5.8	4.5	3.0	3.7	4.4	3.2	3.7	3.7	2.5	3.0
18	6.4	5.8	6.2	5.3	2.8	3.7	3.7	2.7	3.2	3.7	2.0	2.7
19	7.0	6.3	6.8	4.1	2.1	3.0	4.2	2.4	3.1	3.1	1.6	2.2
20	7.0	6.2	6.7	3.3	2.6	2.9	4.4	2.3	3.1	4.4	2.4	3.6
21	6.3	6.0	6.1	4.0	3.2	3.5	5.9	2.1	3.2	5.1	4.2	4.6
22	6.4	5.8	6.0	4.3	3.0	3.6	4.3	1.7	3.0	4.7	3.7	4.2
23	6.8	6.1	6.5	4.0	2.8	3.3	4.9	1.7	3.2	4.5	3.5	3.9
24	6.8	6.2	6.6	4.4	2.6	3.4	3.9	1.3	2.5	4.4	3.5	3.9
25	6.7	6.5	6.7	4.9	2.8	3.6	3.9	1.1	2.3	4.6	3.3	3.8
26	6.9	6.3	6.7	3.4	2.7	3.1	4.2	1.1	2.4	4.0	2.7	3.2
27	6.9	6.0	6.5	4.7	3.1	3.9	2.6	1.2	1.7	3.5	2.2	2.7
28	6.2	5.7	6.0	4.5	3.0	3.7	3.1	1.0	1.9	3.3	2.1	2.6
29	---	---	---	4.4	3.2	3.7	3.3	1.0	1.9	3.3	2.2	2.7
30	---	---	---	4.6	3.2	3.9	4.1	1.1	2.2	3.2	2.3	2.7
31	---	---	---	5.0	3.2	4.0	3.2	1.2	2.0	---	---	---
MONTH	7.6	5.0	6.4	6.7	2.1	4.2	6.3	1.0	3.1	5.5	1.0	3.2
YEAR	14.8	0.7	7.4									

BLACKSTONE RIVER BASIN

0111230 BLACKSTONE RIVER AT MILLVILLE, MASS. --Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	17.0	18.0	16.5	16.5	16.5	---	---	---	1.5	1.0	1.5
2	19.0	16.5	18.0	17.5	16.5	17.0	---	---	---	2.5	1.5	2.0
3	19.0	17.5	18.5	17.5	16.5	17.0	2.0	1.0	1.5	3.0	2.0	2.5
4	17.0	16.0	16.5	16.0	13.0	15.0	2.5	2.0	2.0	2.5	2.0	2.5
5	18.0	16.0	17.0	13.0	11.0	12.0	2.0	1.5	1.5	2.5	2.0	2.5
6	18.0	17.0	17.5	11.0	10.0	10.5	2.0	1.5	1.5	2.0	1.5	1.5
7	17.0	15.5	16.0	10.5	9.0	10.0	4.5	2.5	3.5	2.0	1.0	1.5
8	15.5	14.0	14.5	9.0	7.0	8.0	4.0	3.5	3.5	2.0	1.5	1.5
9	14.0	13.0	13.5	7.0	5.0	6.0	4.0	3.5	3.5	2.5	1.5	1.5
10	14.5	13.5	14.0	6.0	5.0	5.5	4.5	3.5	4.0	4.0	2.5	3.5
11	16.0	14.5	15.5	6.0	5.5	5.5	5.5	4.5	5.0	3.5	3.0	3.5
12	16.0	14.5	15.0	6.0	5.0	5.5	5.0	4.0	4.5	4.0	3.5	3.5
13	15.0	13.5	14.5	7.0	6.0	6.5	4.5	4.0	4.5	5.5	3.0	4.0
14	15.5	14.0	14.5	6.0	4.5	5.5	4.0	3.5	4.0	5.5	4.0	5.0
15	17.5	15.5	16.5	4.5	4.0	4.5	4.0	4.0	4.0	4.0	2.5	3.0
16	18.0	17.0	17.5	6.5	5.0	5.5	6.0	4.0	5.5	2.5	0.5	1.0
17	17.5	16.0	17.0	6.0	4.5	5.5	6.0	5.0	5.5	0.5	0.5	0.5
18	16.0	14.5	15.0	7.5	5.5	6.5	5.0	3.0	4.0	1.0	0.5	1.0
19	14.5	13.0	14.0	9.0	6.5	7.5	3.0	1.5	2.0	3.0	1.0	2.0
20	14.5	13.0	13.5	10.0	9.0	9.5	2.0	1.5	2.0	3.0	2.5	3.0
21	14.0	12.0	13.5	8.5	7.5	8.0	2.0	2.0	2.0	3.5	2.5	3.0
22	14.5	12.5	13.5	7.5	5.5	6.5	---	---	---	3.5	2.5	3.0
23	15.5	14.0	14.5	5.0	3.0	4.0	---	---	---	4.0	3.5	3.5
24	15.0	14.0	14.5	2.5	1.5	2.5	---	---	---	4.5	4.0	4.5
25	14.0	13.5	14.0	2.5	0.0	1.5	---	---	---	5.0	3.5	4.5
26	15.5	14.0	15.0	1.0	0.0	0.5	---	---	---	3.5	1.0	2.0
27	15.5	15.5	15.5	2.0	0.5	1.5	3.5	3.0	3.0	1.0	0.5	0.5
28	---	---	---	3.5	2.5	3.0	4.5	3.0	4.0	1.0	0.5	1.0
29	---	---	---	4.5	3.0	3.5	4.0	3.0	3.5	1.5	0.5	1.0
30	---	---	---	5.5	3.5	4.5	3.5	2.0	2.5	2.0	1.0	1.5
31	---	---	---	---	---	---	2.0	1.5	1.5	1.5	1.0	1.0
MONTH	19.0	12.0	15.5	17.5	0.0	7.0	---	---	---	5.5	0.5	2.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	0.5	1.0	5.0	3.0	4.0	8.5	5.0	6.5	16.5	14.0	15.5
2	1.5	1.0	1.5	4.5	3.5	4.0	8.5	7.0	7.5	16.5	14.0	15.0
3	1.5	1.0	1.5	3.5	0.5	2.0	8.0	6.5	7.5	13.5	12.5	13.0
4	2.5	1.5	2.0	1.5	0.0	1.0	7.0	6.0	6.5	12.5	11.5	12.0
5	1.0	0.5	0.5	1.0	0.5	0.5	8.0	5.0	6.5	12.0	11.0	11.5
6	1.0	0.5	0.5	1.5	0.0	1.0	7.5	6.5	7.0	14.5	10.5	12.5
7	1.5	0.5	1.0	2.0	0.5	1.5	7.0	5.0	6.0	15.0	12.5	14.0
8	0.5	0.5	0.5	3.0	1.5	2.5	6.0	4.0	5.0	14.5	11.5	13.5
9	1.0	0.5	0.5	2.0	0.5	1.5	7.0	4.5	6.0	12.5	10.0	11.5
10	1.0	0.5	1.0	2.5	0.5	1.5	7.0	5.5	6.5	11.5	9.0	10.0
11	1.5	0.5	1.0	3.0	1.0	2.0	6.5	5.5	6.0	12.0	9.5	10.5
12	1.5	0.0	1.0	3.0	2.5	2.5	8.5	5.5	7.0	13.5	10.0	11.5
13	2.5	1.0	1.5	4.0	2.5	3.0	7.5	6.5	7.0	16.0	11.5	13.5
14	2.5	2.0	2.0	3.0	1.5	2.5	8.0	6.5	7.0	16.5	14.0	15.0
15	3.0	2.0	2.5	1.0	0.5	1.0	7.5	6.5	7.0	15.5	14.5	15.0
16	---	---	---	4.0	1.0	2.5	10.0	6.5	8.5	17.5	14.5	16.0
17	---	---	---	3.5	2.5	3.5	12.0	9.0	10.5	18.5	16.5	17.5
18	---	---	---	4.0	2.5	3.0	13.0	10.0	11.5	19.5	16.5	18.0
19	---	---	---	5.0	2.0	3.5	15.5	12.0	13.5	18.5	16.5	17.5
20	---	---	---	4.5	2.0	3.5	15.0	10.0	12.5	16.0	14.0	15.0
21	---	---	---	5.0	3.0	4.0	11.5	8.5	10.0	18.0	13.5	15.5
22	---	---	---	5.5	4.5	5.0	10.5	9.0	10.0	19.0	16.5	18.0
23	0.5	0.5	0.5	5.5	5.0	5.5	10.0	9.0	9.5	20.5	16.5	18.5
24	1.5	0.5	0.5	5.0	4.0	4.5	11.0	9.0	10.0	20.5	17.5	19.0
25	2.0	1.0	1.5	5.0	3.5	4.0	12.0	9.5	11.0	19.0	17.0	18.0
26	2.0	1.5	1.5	---	---	---	12.5	10.0	11.0	18.5	15.5	17.0
27	2.5	1.0	2.0	---	---	---	12.0	10.0	11.0	19.0	15.5	17.5
28	4.0	2.0	3.0	5.5	3.0	4.5	13.0	9.0	11.0	20.5	16.5	18.5
29	5.0	3.0	4.0	6.5	4.5	5.5	15.0	11.0	13.0	21.5	18.5	20.0
30	---	---	---	6.0	5.5	6.0	16.0	12.0	14.0	21.5	19.0	20.5
31	---	---	---	5.5	5.0	5.5	---	---	---	21.5	20.5	20.5
MONTH	---	---	---	6.5	0.0	3.0	16.0	4.0	9.0	21.5	9.0	15.5

307

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

0116500 PAWTUXET RIVER AT CRANSTON, R.I.

LOCATION.--Lat 41°45'03", long 71°26'44", Providence County, two-parameter monitor at gaging station on left bank at Cranston, 0.7 mile upstream from Pocasset River.

DRAINAGE AREA.--200 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1972.
Water temperatures: November 1961 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, greater than 550 micromhos Nov. 24; minimum, 96 micromhos June 19.

Water temperatures: Maximum, 28.0°C July 18, 19; minimum, freezing point on several days during winter period.

Period of record:

Specific conductance: Maximum, greater than 550 micromhos Jan. 30, 31, Feb. 5, 6, Nov. 24, 1971; minimum, 65 micromhos Apr. 5, 1970.

Water temperatures: Maximum, 30.0°C July 1, 1964; minimum, freezing point on many days during winter periods 1965-70, 1972.

REMARKS.--Recorder not operating Aug. 15 to Sept. 30. Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	377	305	340	499	369	384	248	212	237	348	276	319
2	512	383	444	480	373	410	288	249	271	291	207	257
3	516	470	486	486	332	395	326	280	307	256	195	211
4	520	492	504	386	326	344	367	317	346	233	211	222
5	520	423	490	472	376	404	364	344	350	313	215	260
6	415	329	377	478	437	454	354	317	344	320	294	307
7	335	315	321	486	419	458	418	316	359	328	293	312
8	429	341	390	428	409	419	323	284	294	337	318	326
9	460	428	449	522	415	439	321	304	309	338	266	320
10	449	299	376	524	421	477	364	324	348	257	161	196
11	337	308	321	467	342	369	380	345	361	178	129	145
12	345	307	335	459	400	425	377	358	364	261	181	217
13	298	273	283	490	442	458	362	329	350	285	244	264
14	269	236	256	490	439	457	418	330	368	303	262	286
15	332	238	272	446	401	428	---	---	---	315	260	286
16	407	338	370	524	402	456	---	---	---	272	238	262
17	418	405	411	502	349	412	---	---	---	237	170	206
18	412	375	397	361	329	336	---	---	---	194	170	178
19	391	363	370	414	350	375	---	---	---	243	202	228
20	429	397	414	498	419	469	412	371	391	284	243	273
21	401	327	362	520	484	507	506	386	454	305	273	290
22	456	340	384	488	454	467	378	362	369	290	271	282
23	496	456	472	476	437	450	430	374	402	314	271	292
24	504	470	490	>550	496	---	425	337	398	310	216	265
25	474	387	422	500	290	357	358	260	315	217	201	206
26	436	378	397	344	327	338	254	218	227	245	201	225
27	524	439	479	384	346	370	229	190	211	304	239	271
28	460	295	364	342	257	286	227	195	211	325	269	312
29	359	289	306	256	188	234	272	205	231	346	300	321
30	422	362	396	208	178	188	498	279	352	368	324	347
31	435	409	423	---	---	---	503	346	422	368	218	301
MONTH	524	236	390	550	178	349	506	190	330	368	129	264

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	247	198	226	281	210	242	144	127	136	279	229	256
2	293	211	265	240	203	213	142	137	140	227	177	208
3	510	275	358	213	116	160	141	135	139	261	214	235
4	352	213	239	144	108	128	137	129	133	227	170	197
5	287	203	235	135	107	120	138	123	131	191	143	167
6	289	245	266	130	111	120	144	131	137	164	128	151
7	282	254	268	150	118	138	141	128	135	135	126	131
8	277	201	222	172	138	158	132	123	128	137	121	130
9	243	226	236	164	135	145	134	124	130	209	125	159
10	289	245	272	160	126	143	139	128	132	151	141	146
11	307	282	295	162	127	145	259	143	206	165	141	155
12	326	283	306	148	123	138	269	229	249	175	158	167
13	339	277	297	150	128	144	285	257	275	185	176	180
14	262	181	195	150	133	142	281	242	258	243	187	215
15	206	177	186	225	148	198	242	220	232	244	135	189
16	270	208	227	181	149	165	213	174	186	143	131	137
17	279	238	259	170	128	148	176	155	163	150	140	146
18	280	262	270	140	106	123	223	163	196	172	146	156
19	425	277	321	---	---	---	268	209	234	185	149	164
20	270	216	237	---	---	---	268	229	251	176	146	160
21	215	188	206	---	---	---	246	195	219	146	120	127
22	205	162	193	152	129	138	191	153	170	127	117	121
23	201	162	187	137	119	125	171	120	131	162	131	151
24	325	205	262	136	112	123	130	115	121	180	141	161
25	324	264	287	140	129	135	176	137	148	193	156	177
26	456	262	319	125	112	115	182	169	175	179	168	175
27	416	333	349	133	112	121	196	175	184	183	165	171
28	324	232	270	135	122	129	233	196	211	255	187	224
29	265	211	228	140	129	134	268	236	257	251	181	212
30	---	---	---	138	134	135	277	268	272	183	154	173
31	---	---	---	135	130	132	---	---	---	198	136	153
MONTH	510	177	258	281	106	145	285	115	183	279	117	171
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	185	147	171	131	112	123	254	186	198	---	---	---
2	225	176	193	111	103	105	260	198	229	---	---	---
3	193	149	172	114	101	104	293	218	264	---	---	---
4	160	149	154	164	116	148	264	230	249	---	---	---
5	153	127	136	162	129	150	290	239	265	---	---	---
6	219	138	166	127	115	119	317	293	307	---	---	---
7	242	189	208	118	112	115	312	264	292	---	---	---
8	219	190	201	119	116	117	319	240	282	---	---	---
9	244	181	197	161	117	142	268	229	248	---	---	---
10	202	178	195	169	131	145	278	262	269	---	---	---
11	201	148	176	166	137	152	290	268	281	---	---	---
12	151	131	144	201	155	179	310	289	300	---	---	---
13	190	146	161	212	191	203	312	302	306	---	---	---
14	225	194	205	224	215	219	300	273	287	---	---	---
15	239	212	222	229	194	208	---	---	---	---	---	---
16	232	218	223	236	184	208	---	---	---	---	---	---
17	221	194	207	183	166	170	---	---	---	---	---	---
18	208	175	196	193	166	182	---	---	---	---	---	---
19	166	96	118	223	180	210	---	---	---	---	---	---
20	111	104	108	264	219	250	---	---	---	---	---	---
21	131	105	121	262	249	256	---	---	---	---	---	---
22	139	118	125	294	262	282	---	---	---	---	---	---
23	135	112	124	293	278	287	---	---	---	---	---	---
24	131	110	122	273	264	270	---	---	---	---	---	---
25	113	104	108	269	172	230	---	---	---	---	---	---
26	121	107	110	199	167	183	---	---	---	---	---	---
27	139	112	129	223	179	192	---	---	---	---	---	---
28	148	126	136	251	190	208	---	---	---	---	---	---
29	155	131	141	250	216	226	---	---	---	---	---	---
30	144	126	134	222	212	218	---	---	---	---	---	---
31	---	---	---	281	210	232	---	---	---	---	---	---
MONTH	244	96	160	294	101	188	---	---	---	---	---	---
YEAR	550	96	249									

PANTUXET RIVER BASIN

01116500 PANTUXET RIVER AT CRANSTON, R.I.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	18.5	19.5									
2	21.0	18.0	19.5	17.0	15.5	16.0	5.5	3.5	5.0	2.0	1.0	1.5
3	21.0	18.5	20.0	17.5	16.5	17.0	4.0	2.5	3.0	4.5	1.5	2.5
4	19.5	17.0	18.5	17.0	16.5	17.0	3.5	2.0	2.5	4.0	2.5	3.0
5	20.5	17.5	19.0	16.0	14.0	15.5	3.5	2.0	2.5	3.5	2.5	3.0
6				14.0	12.5	13.5	3.5	1.5	2.5	3.5	2.0	3.0
7	19.5	18.5	19.0									
8	18.5	16.5	17.5	13.0	12.0	12.5	3.5	1.5	2.0	1.5	1.0	1.5
9	17.5	15.0	16.0	12.5	10.5	12.0	6.0	3.5	5.0	1.5	0.5	1.0
10	16.5	15.0	15.5	10.5	8.0	9.5	4.5	4.5	4.5	1.0	0.5	0.5
11				8.5	7.5	8.0	5.0	4.5	5.0	3.0	0.0	1.0
12	17.0	15.5	16.5	8.0	7.0	7.5	6.5	5.0	5.5	4.0	2.5	3.5
13	17.0	15.0	15.5	7.5	6.0	6.5	8.5	6.0	7.5	5.0	4.0	4.5
14	16.0	14.5	15.0	7.5	6.5	7.0	7.5	6.0	7.0	6.0	5.0	5.0
15	16.5	14.5	15.5	7.5	5.5	6.5	7.0	5.5	6.5	7.0	4.5	5.0
16				6.5	5.0	5.5	6.0	4.5	5.5	7.5	5.5	6.5
17	19.0	17.0	18.0				---	---	---	5.5	3.5	5.0
18	17.5	15.5	16.5	7.0	5.5	6.0	---	---	---			
19	17.0	14.5	15.5	7.5	5.5	6.5	---	---	---	3.5	0.5	2.0
20	16.5	14.0	15.0	7.5	6.0	6.5	---	---	---	1.0	0.5	0.5
21				8.5	6.0	7.0	---	---	---	3.0	1.0	2.0
22	16.0	14.0	15.0	9.0	7.5	8.5	---	---	---	3.5	2.0	3.0
23	16.5	14.5	15.5	8.5	7.0	7.5	4.0	3.5	3.5	4.0	2.5	3.5
24	15.5	14.5	15.0	8.0	6.5	7.5	4.5	3.0	4.0	5.0	4.0	4.5
25	16.0	14.5	15.5	6.5	5.0	5.5	2.5	1.5	2.0	4.5	4.0	4.0
26				6.0	4.5	5.0	5.5	2.5	3.5	5.5	4.5	5.0
27	16.5	15.0	15.5	5.0	4.5	4.5	4.5	2.5	3.0	6.0	5.0	5.5
28	16.5	15.5	16.5	4.5	3.5	4.0	3.5	2.5	3.0	6.5	5.0	6.0
29	18.0	16.0	17.0	5.0	3.5	4.5	4.0	3.5	3.5	4.5	2.0	3.0
30	18.0	16.5	17.0	5.5	5.0	5.0	5.5	3.5	3.5	2.0	1.0	1.5
31	17.0	15.5	16.5	6.0	4.5	5.0	5.0	3.5	4.0	1.5	1.0	1.0
MONTH	21.0	14.0	16.5	---	---	---	2.5	1.5	2.0	3.0	1.5	2.0
				17.5	3.5	8.5	8.5	1.5	4.0	2.0	0.5	1.5
										7.5	0.0	3.0

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.0	0.5	1.0									
2	2.0	1.0	1.5	6.5	4.0	5.5	11.5	9.5	10.5	16.0	13.5	15.0
3	2.5	1.0	1.5	6.5	4.5	5.5	9.5	5.5	7.0	15.0	14.5	15.0
4	3.5	1.5	2.5	7.5	3.5	5.5	9.5	4.5	5.0	15.0	14.0	14.5
5	1.5	0.5	1.0	3.5	2.5	3.0	9.0	5.0	7.5	14.5	14.0	14.0
6				3.0	1.5	2.0	11.5	9.0	10.5	13.5	12.5	13.5
7	1.0	0.0	0.5									
8	1.5	0.5	1.0	2.5	1.0	1.5	11.5	9.5	10.5	14.0	11.5	13.0
9	1.5	0.0	0.5	3.5	1.5	2.5	12.5	11.5	12.0	15.0	12.5	14.0
10	2.0	0.5	1.0	4.5	3.0	4.0	12.5	10.5	11.0	15.0	13.0	14.5
11				2.5	1.5	2.0	10.0	6.5	8.5	13.0	10.5	12.0
12	2.0	0.5	1.5	3.0	1.5	2.0	6.0	5.0	5.5	11.5	9.5	10.5
13	2.5	0.5	1.5	3.5	1.5	2.5						
14	3.0	1.5	2.5	4.5	3.5	4.0	6.5	5.5	6.0	12.5	10.5	11.5
15	3.5	2.0	3.0	5.5	4.0	4.5	8.0	5.5	7.0	13.5	11.5	12.5
16	4.5	2.5	4.0	5.0	3.0	4.0	7.5	6.5	7.0	14.5	12.0	13.0
17				8.0	6.5	7.5	8.0	6.5	7.5	15.0	13.5	14.5
18	5.0	4.0	4.0	3.0	1.5	2.5				15.0	13.5	14.5
19	4.0	3.0	3.5	4.5	2.5	3.5	9.5	7.0	9.5	15.0	13.0	14.0
20	4.0	3.0	3.5	6.0	4.5	5.5	11.0	8.5	10.0	16.0	14.0	14.0
21	3.5	1.5	2.5	6.0	4.5	5.5	13.0	10.0	11.5	17.0	14.5	15.0
22	1.5	0.0	1.0	---	---	---	14.5	11.5	13.0	16.5	15.0	15.5
23				---	---	---	14.0	10.5	12.0	15.0	13.5	14.0
24	1.0	0.0	0.5									
25	2.5	1.0	1.5	3.5	1.5	2.5	11.5	9.5	10.5	16.0	13.0	14.5
26	2.0	0.5	1.0	6.5	4.5	5.5	10.0	9.0	9.0	17.5	15.5	16.0
27	2.5	1.0	1.5	6.5	5.5	6.0	10.0	8.5	9.0	18.0	15.5	16.5
28	3.0	2.0	2.5	5.5	5.0	5.0	10.0	9.0	9.5	18.0	16.0	17.0
29				5.5	4.5	5.0	10.0	9.0	9.5	17.0	16.0	16.5
30	3.0	2.5	3.0	6.0	4.5	5.0						
31	3.5	2.0	3.0	7.5	5.5	6.5	10.5	9.0	10.0	16.0	14.5	15.5
MONTH	5.5	0.0	2.0	12.0	1.0	5.0	14.5	4.5	9.5	20.0	9.5	15.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972. --Continued

[illegible]

THAMES RIVER BASIN

01123990 QUINEBAUG RIVER NEAR DUDLEY, MASS.
(Formerly published as 01124000 Quinebaug River at Quinebaug, Conn.)

LOCATION.--Lat 42°01'40", long 71°57'22", Worcester County, on right bank, 50 ft upstream from bridge on State Highway 131, 0.2 mile upstream from Massachusetts-Connecticut State line, 0.4 mile upstream from gaging station at Quinebaug, Conn., and 2.0 miles southwest of Dudley, Mass.

DRAINAGE AREA.--156 sq mi at gage at Quinebaug, Conn.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.
Water temperatures: October 1968 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, 380 micromhos Feb. 4; minimum, 56 micromhos Feb. 20.

pH: Maximum, 7.6 Oct. 4; minimum, 6.1 Sept. 27.

Dissolved oxygen: Maximum, 19.6 mg/l Feb. 12; minimum, 0.6 mg/l Aug. 26.

Water temperatures: Maximum, 30.5°C Aug. 26; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance: Maximum recorded, 393 micromhos Sept. 24, 1970; minimum, 56 micromhos Feb. 20, 1972.

pH: Maximum, 9.0 July 13, 16, 1971; minimum, 4.9 July 18, 1970.

Dissolved oxygen: Maximum, 19.6 mg/l Feb. 12, 1972; minimum, 0.4 mg/l Aug. 28, 1970.

Water temperatures: Maximum recorded, 32.5°C July 29, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Figures of daily discharge for gaging station at Quinebaug, Conn. (sta 01124000) are used for this site. Additional chemical analyses for this station in table of samples collected at miscellaneous sites.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	105	100	102	172	162	166	157	149	152	141	124	132
2	103	100	100	171	148	160	149	138	144	---	---	---
3	101	107	102	158	146	152	140	141	143	---	---	---
4	104	106	100	161	149	154	146	140	144	146	134	139
5	107	103	102	162	150	154	143	139	141	156	126	138
6	105	107	101	163	153	157	150	144	146	150	134	141
7	100	100	102	158	151	155	315	149	195	142	131	135
8	217	162	103	160	151	157	174	140	160	142	131	135
9	107	104	101	174	160	168	148	137	142	160	120	134
10	107	114	109	174	166	170	139	130	134	213	134	154
11	131	101	121	174	165	169	132	120	124	144	126	134
12	135	125	131	180	172	176	120	115	117	132	120	126
13	140	136	130	181	171	174	117	113	114	130	119	123
14	140	133	137	181	173	178	129	115	124	120	112	114
15	140	141	145	185	178	182	134	124	129	116	111	114
16	140	128	135	187	169	177	137	119	130	123	83	112
17	128	118	120	181	174	177	136	120	128	129	100	121
18	124	114	119	184	174	180	126	119	122	132	130	131
19	126	111	116	184	176	181	128	124	126	135	129	131
20	120	113	117	186	177	182	162	128	139	141	118	131
21	118	110	114	178	169	175	167	138	149	192	133	150
22	110	113	116	180	161	171	156	140	145	193	137	150
23	120	115	119	185	172	176	152	141	147	144	133	137
24	122	118	120	182	164	173	149	132	142	138	131	134
25	120	118	124	178	166	172	130	131	135	140	135	136
26	144	126	137	202	165	177	143	135	138	146	118	135
27	153	143	149	175	163	171	138	136	137	126	68	116
28	162	147	155	170	154	158	137	128	133	132	121	125
29	166	157	161	177	163	173	134	130	132	137	124	130
30	168	161	164	158	140	154	136	133	135	140	123	129
31	168	162	164	---	---	---	138	136	137	138	129	134
MONTH	217	101	150	202	140	169	315	113	138	213	68	132

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972. --Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	138	127	130	203	157	177	85	78	82	110	107	109
2	148	129	139	213	182	194	87	77	79	114	110	113
3	148	141	147	175	116	120	87	81	84	117	97	113
4	180	137	212	144	114	123	82	81	85	101	97	99
5	215	126	175	123	112	116	85	80	93	100	99	99
6	171	101	147	121	111	117	101	92	95	---	---	---
7	160	139	149	116	100	106	112	97	103	---	---	---
8	167	95	145	108	98	104	110	104	107	---	---	---
9	149	114	139	109	101	105	109	104	106	---	---	---
10	174	118	146	111	103	107	113	106	109	---	---	---
11	157	113	145	110	101	105	143	115	129	---	---	---
12	150	103	147	---	---	---	146	137	141	---	---	---
13	146	139	141	---	---	---	141	103	129	---	---	---
14	---	---	---	---	---	---	108	95	101	---	---	---
15	---	---	---	---	---	---	87	82	84	---	---	---
16	126	117	119	---	---	---	95	80	93	---	---	---
17	117	107	111	---	---	---	102	91	95	---	---	---
18	108	102	104	---	---	---	103	92	96	---	---	---
19	105	101	103	---	---	---	97	91	94	---	---	---
20	107	96	101	---	---	---	100	89	93	---	---	---
21	112	84	105	94	89	90	109	95	100	---	---	---
22	121	100	113	99	79	85	94	89	90	---	---	---
23	127	80	107	88	80	83	90	86	88	---	---	---
24	151	112	121	90	78	82	80	85	87	---	---	---
25	155	126	136	97	96	99	88	84	86	---	---	---
26	144	124	131	98	84	86	95	86	89	---	---	---
27	151	115	129	95	78	82	105	91	96	---	---	---
28	146	127	147	98	81	83	109	101	103	---	---	---
29	147	140	143	94	81	82	109	103	106	---	---	---
30	---	---	---	90	82	85	110	104	107	---	---	---
31	---	---	---	97	82	85	---	---	---	---	---	---
MONTH	180	56	135	---	---	---	151	77	99	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	107	96	101	159	136	147	---	---	---
2	---	---	---	121	102	110	199	143	161	---	---	---
3	---	---	---	140	94	113	324	199	248	---	---	---
4	---	---	---	101	94	97	315	262	282	---	---	---
5	---	---	---	119	110	102	208	127	163	---	---	---
6	---	---	---	103	98	100	---	---	---	---	---	---
7	---	---	---	103	100	102	---	---	---	---	---	---
8	---	---	---	104	99	102	---	---	---	---	---	---
9	---	---	---	104	97	101	---	---	---	---	---	---
10	---	---	---	109	104	107	---	---	---	---	---	---
11	---	---	---	100	105	107	---	---	---	---	---	---
12	---	---	---	100	107	106	---	---	---	---	---	---
13	---	---	---	108	102	106	---	---	---	---	---	---
14	96	94	95	113	100	105	---	---	---	---	---	---
15	99	95	97	114	109	113	---	---	---	---	---	---
16	101	98	99	113	109	110	---	---	---	---	---	---
17	102	95	100	114	110	112	---	---	---	---	---	---
18	110	101	105	119	107	123	---	---	---	---	---	---
19	150	94	114	129	88	108	---	---	---	---	---	---
20	98	95	97	101	77	89	---	---	---	---	---	---
21	90	96	93	116	103	109	---	---	---	---	---	---
22	97	92	94	107	103	105	---	---	---	---	---	---
23	90	91	95	114	106	110	---	---	---	---	---	---
24	99	94	96	126	114	119	---	---	---	---	---	---
25	94	92	93	131	99	122	---	---	---	---	---	---
26	101	91	96	118	99	108	---	---	---	---	---	---
27	97	91	94	124	116	119	---	---	---	---	---	---
28	96	93	95	129	122	127	---	---	---	166	148	152
29	90	98	97	142	113	129	---	---	---	158	149	152
30	98	95	97	133	127	130	---	---	---	176	151	157
31	---	---	---	141	129	134	---	---	---	187	174	181
MONTH	---	---	---	142	77	111	---	---	---	---	---	---
YEAR	180	56	130	---	---	---	---	---	---	---	---	---

THAMES RIVER BASIN

01123990 QUINEBAUG RIVER NEAR DUDLEY, MASS.--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	6.4	6.5	6.9	6.8	6.7	6.8	6.6	6.7	7.0	6.6	6.9
2	7.1	6.4	6.7	6.7	6.4	6.6	6.9	6.6	6.7	---	---	---
3	7.5	6.4	6.9	6.9	6.5	6.6	6.8	6.7	6.7	---	---	---
4	7.6	6.5	6.9	6.9	6.7	6.8	6.9	6.6	6.8	6.8	6.7	6.7
5	6.8	6.4	6.6	6.0	6.7	6.8	6.0	6.4	6.6	6.7	6.5	6.6
6	6.6	6.3	6.5	7.0	6.7	6.8	6.0	6.7	6.9	6.7	6.6	6.6
7	6.5	6.3	6.4	7.0	6.7	6.8	6.9	6.7	6.9	6.7	6.6	6.7
8	6.5	6.1	6.4	7.0	6.6	6.9	6.9	6.7	6.8	6.7	6.6	6.7
9	6.7	6.3	6.5	7.0	6.8	6.9	6.8	6.7	6.8	6.7	6.5	6.6
10	6.7	6.4	6.6	6.2	6.7	6.8	6.8	6.7	6.8	---	---	---
11	6.7	6.5	6.6	6.9	6.7	6.8	6.8	6.6	6.7	---	---	---
12	6.7	6.6	6.7	6.9	6.6	6.8	6.7	6.6	6.7	---	---	---
13	6.7	6.6	6.7	7.3	6.7	6.8	6.8	6.6	6.7	6.7	6.4	6.5
14	6.7	6.7	6.8	7.0	6.8	6.9	6.8	6.6	6.7	6.5	6.3	6.4
15	6.9	6.7	6.8	7.0	6.8	6.9	6.7	6.6	6.7	6.8	6.4	6.5
16	7.0	6.6	6.8	7.0	6.7	6.8	6.8	6.6	6.7	6.7	6.3	6.5
17	6.9	6.7	6.8	6.8	6.6	6.7	6.8	6.7	6.7	6.5	6.3	6.4
18	6.8	6.6	6.7	6.9	6.5	6.6	6.8	6.7	6.7	6.6	6.4	6.5
19	6.8	6.5	6.6	6.8	6.4	6.7	6.8	6.7	6.7	6.7	6.5	6.6
20	6.4	6.4	6.6	6.7	6.7	6.8	6.9	6.8	6.8	6.6	6.4	6.5
21	6.9	6.5	6.6	6.9	6.7	6.8	6.9	6.8	6.8	6.6	6.3	6.5
22	6.8	6.5	6.5	7.0	6.7	6.8	6.9	6.8	6.8	6.7	6.5	6.5
23	6.9	6.5	6.7	6.9	6.7	6.8	7.0	6.8	6.9	6.7	6.5	6.6
24	6.7	6.5	6.6	6.9	6.7	6.8	7.1	6.7	6.9	6.7	6.6	6.6
25	6.7	6.5	6.6	7.0	6.8	6.9	7.0	6.6	6.9	6.8	6.6	6.7
26	6.8	6.6	6.6	7.0	6.8	7.0	6.7	6.6	6.7	6.6	6.6	6.6
27	6.7	6.4	6.5	7.1	6.8	6.9	6.8	6.7	6.7	6.8	6.6	6.8
28	6.8	6.5	6.6	7.0	6.9	6.9	6.8	6.7	6.7	6.8	6.7	6.7
29	6.8	6.4	6.6	6.9	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8
30	6.9	6.4	6.6	6.7	6.6	6.6	7.2	6.8	7.0	6.8	6.7	6.8
31	6.9	6.5	6.7	---	---	---	7.1	7.0	7.0	6.9	6.7	6.8
MONTH	7.4	6.3	6.6	7.1	6.4	6.8	7.2	6.4	6.8	7.0	6.3	6.6

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.9	6.7	6.3	6.9	6.8	6.9	6.8	6.5	6.7	7.2	6.6	6.9
2	7.0	6.8	6.9	7.0	6.8	6.9	6.8	6.5	6.6	6.9	6.6	6.8
3	7.0	6.9	6.9	6.9	6.6	6.7	6.9	6.6	6.7	6.9	6.6	6.8
4	7.0	6.7	6.8	6.7	6.6	6.7	6.8	6.5	6.7	6.9	6.6	6.8
5	6.9	6.8	6.8	6.8	6.6	6.7	6.8	6.5	6.6	6.8	6.7	6.7
6	6.9	6.7	6.8	6.3	6.6	6.7	6.6	6.4	6.5	---	---	---
7	6.8	6.6	6.7	6.7	6.6	6.7	6.7	6.4	6.6	---	---	---
8	6.7	6.5	6.6	6.8	6.7	6.8	6.8	6.6	6.7	---	---	---
9	6.6	6.5	6.5	6.7	6.6	6.7	6.8	6.6	6.7	---	---	---
10	6.6	6.4	6.5	7.1	6.6	6.8	6.9	6.6	6.8	---	---	---
11	6.6	6.4	6.5	---	6.9	7.0	6.9	6.7	6.8	---	---	---
12	6.7	6.5	6.5	---	---	---	7.0	6.8	6.9	---	---	---
13	6.7	6.6	6.6	---	---	---	6.9	6.7	6.8	---	---	---
14	---	---	---	---	---	---	6.9	6.6	6.7	---	---	---
15	---	---	---	---	---	---	6.9	6.6	6.9	---	---	---
16	6.7	6.5	6.5	---	---	---	7.0	6.6	6.8	---	---	---
17	6.6	6.5	6.5	---	---	---	7.0	6.6	6.8	---	---	---
18	6.7	6.4	6.6	---	---	---	7.0	6.7	6.9	---	---	---
19	6.7	6.5	6.5	---	---	---	7.0	6.7	6.8	---	---	---
20	6.7	6.5	6.6	---	---	---	6.8	6.6	6.7	---	---	---
21	6.7	6.5	6.6	6.6	6.5	6.6	7.0	6.6	6.8	---	---	---
22	6.8	6.6	6.7	6.7	6.5	6.6	6.9	6.6	6.7	---	---	---
23	6.8	6.3	6.6	6.7	6.5	6.6	6.9	6.6	6.7	---	---	---
24	7.0	6.6	6.8	6.7	6.5	6.6	6.9	6.5	6.7	---	---	---
25	7.0	6.7	6.8	6.7	6.5	6.6	7.0	6.5	6.7	---	---	---
26	6.9	6.8	6.9	6.7	6.5	6.6	7.1	6.5	6.8	---	---	---
27	6.9	6.8	6.9	6.6	6.4	6.6	6.9	6.5	6.7	---	---	---
28	7.1	6.8	6.9	6.7	6.5	6.6	7.0	6.5	6.8	---	---	---
29	7.1	6.8	6.9	6.7	6.5	6.6	7.0	6.6	6.8	---	---	---
30	---	---	---	6.7	6.5	6.6	7.1	6.6	6.8	---	---	---
31	---	---	---	6.7	6.6	6.6	---	---	---	---	---	---
MONTH	7.1	6.3	6.7	---	---	---	7.1	6.4	6.7	---	---	---

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972. --Continued

МПК ТН	---	---	---	7,9	8,3	8,7	---	---	---	---	---
УЕАЭ	7,6	8,1	8,7								

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

THAMES RIVER BASIN

01123990 GUINEBAUG RIVER NEAR DUDLEY, MASS.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972. --Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	13.2	12.3	12.6	12.6	11.8	12.2	10.3	9.7	9.9
2	13.6	13.1	13.3	13.0	12.3	12.7	12.4	12.0	12.2	9.6	8.8	9.1
3	13.5	12.6	13.1	13.4	12.7	13.1	12.6	12.0	12.3	10.0	9.2	9.5
4	13.1	12.4	12.7	13.7	13.4	13.5	12.5	12.0	12.3	10.0	9.5	9.8
5	13.1	13.2	13.2	13.5	12.6	13.1	13.1	11.0	12.5	10.3	9.4	10.0
6	13.4	13.2	13.3	13.4	13.2	13.4	12.4	11.7	12.1	---	---	---
7	13.8	13.1	13.4	13.4	12.9	13.3	12.4	11.6	12.1	---	---	---
8	13.4	13.4	13.4	13.4	12.9	13.1	12.7	11.8	12.3	---	---	---
9	13.2	13.0	13.1	13.7	13.4	13.6	12.5	11.3	12.0	---	---	---
10	13.0	13.0	13.0	13.4	12.5	13.3	12.4	11.4	11.9	---	---	---
11	13.3	13.0	13.1	12.9	12.3	12.6	12.4	11.5	12.0	---	---	---
12	13.4	12.0	13.2	---	---	---	12.5	11.3	12.0	---	---	---
13	13.6	13.2	13.4	---	---	---	12.1	11.3	11.9	---	---	---
14	---	---	---	---	---	---	12.3	11.7	12.0	---	---	---
15	---	---	---	---	---	---	12.2	11.6	12.0	---	---	---
16	13.4	13.1	13.3	---	---	---	12.1	11.0	11.6	---	---	---
17	13.9	13.2	13.5	---	---	---	11.7	10.7	11.2	---	---	---
18	13.6	13.2	13.5	---	---	---	11.6	10.4	11.0	---	---	---
19	13.7	13.1	13.3	---	---	---	11.0	9.7	10.4	---	---	---
20	13.8	13.1	13.5	---	---	---	11.1	9.7	10.5	---	---	---
21	13.9	13.4	13.7	13.2	12.9	13.0	11.6	10.6	11.1	---	---	---
22	13.9	13.3	13.7	13.0	12.3	12.7	11.3	10.8	11.0	---	---	---
23	13.1	13.2	13.2	12.7	12.4	12.6	11.4	10.7	11.0	---	---	---
24	13.6	12.9	13.3	12.9	12.6	12.7	11.1	10.5	10.8	---	---	---
25	13.4	12.0	13.1	13.1	12.7	12.9	11.2	10.1	10.6	---	---	---
26	13.1	12.8	12.9	13.2	12.7	13.0	11.1	10.0	10.5	---	---	---
27	13.4	12.4	13.1	13.1	12.9	13.0	11.0	10.1	10.6	---	---	---
28	13.2	12.4	12.8	13.2	12.5	12.9	11.2	10.0	10.6	---	---	---
29	13.0	12.3	12.6	12.9	12.4	12.7	10.7	9.6	10.2	---	---	---
30	---	---	---	12.8	12.6	12.7	10.7	9.5	10.0	---	---	---
31	---	---	---	12.7	12.3	12.6	---	---	---	---	---	---
MONTH	13.6	12.3	13.3	---	---	---	13.1	9.3	11.4	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.0	6.2	7.2	7.1	3.4	5.7	8.3	1.6	4.3
2	---	---	---	8.2	6.9	7.7	6.3	3.0	3.7	7.3	1.1	3.3
3	---	---	---	7.8	6.8	7.3	---	---	---	6.7	1.7	4.1
4	---	---	---	8.0	7.1	7.6	---	---	---	7.8	2.2	7.0
5	---	---	---	8.1	7.5	7.9	---	---	---	8.2	2.1	7.1
6	---	---	---	8.5	7.7	8.1	---	---	---	7.5	2.3	6.3
7	---	---	---	8.6	7.2	7.9	---	---	---	7.0	4.3	5.8
8	---	---	---	8.2	7.3	7.8	---	---	---	6.6	3.1	4.8
9	---	---	---	8.3	7.5	8.0	---	---	---	6.8	3.2	4.6
10	---	---	---	7.9	6.8	7.5	---	---	---	8.2	4.6	6.1
11	---	---	---	7.9	7.0	7.5	7.2	4.8	6.1	8.7	3.7	6.1
12	---	---	---	---	---	---	8.3	3.9	6.4	7.1	2.7	4.9
13	---	---	---	---	---	---	8.9	4.8	6.7	5.5	2.5	3.6
14	8.6	7.7	9.0	---	---	---	8.5	4.0	6.1	6.1	2.4	3.8
15	9.2	7.1	7.4	---	---	---	8.9	3.0	4.7	6.1	2.7	4.2
16	9.0	7.0	7.4	---	---	---	5.6	2.8	4.1	6.8	2.8	4.3
17	7.5	6.9	7.2	---	---	---	6.0	2.6	4.2	6.7	2.7	4.3
18	6.8	5.8	6.4	---	---	---	7.3	4.6	5.6	6.6	2.4	3.9
19	4.3	1.3	6.3	---	---	---	7.8	4.1	5.4	---	---	---
20	9.5	7.4	8.1	---	---	---	7.8	4.1	5.7	7.4	6.9	7.1
21	7.9	7.4	7.7	---	---	---	8.1	3.7	5.7	7.6	6.8	7.1
22	7.7	7.4	7.5	---	---	---	5.6	3.1	4.4	7.5	6.4	6.9
23	8.2	7.8	8.0	---	---	---	---	---	---	8.0	6.7	7.2
24	8.4	7.8	8.1	---	---	---	---	---	---	8.4	7.0	7.5
25	8.7	8.2	8.4	7.2	6.4	6.9	6.6	0.9	4.0	8.5	5.7	7.2
26	8.8	8.0	8.5	7.9	6.4	7.2	7.0	0.6	2.9	7.4	4.5	5.9
27	9.3	7.6	8.7	7.5	6.0	6.7	5.8	1.0	2.8	6.3	4.2	5.1
28	8.4	7.5	8.0	7.5	5.1	6.3	6.5	1.3	3.5	6.9	3.6	5.1
29	7.9	6.5	7.2	7.8	5.7	6.6	5.7	1.1	3.0	5.2	2.0	3.7
30	7.3	6.7	7.0	8.3	5.6	6.8	6.5	0.8	2.9	4.8	1.8	3.3
31	---	---	---	8.3	5.5	6.6	6.1	0.9	3.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	8.7	1.1	5.3
YEAR	19.6	0.6	9.3	---	---	---	---	---	---	---	---	---

THAMES RIVER BASIN

317

01123990 QUINEBAUG RIVER NEAR DUDLEY, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.0	16.5	19.0	17.5	14.5	16.0	2.0	0.0	1.5	---	---	---
2	23.5	16.5	19.5	19.0	14.0	17.5	1.0	0.0	0.5	---	---	---
3	23.0	16.0	19.5	17.5	14.0	16.5	1.5	0.5	1.0	---	---	---
4	23.0	14.5	17.0	14.5	11.5	13.5	1.5	1.0	1.0	---	---	---
5	20.0	16.5	18.0	12.0	9.5	11.0	1.0	0.5	0.5	2.0	1.0	1.5
6	23.0	17.5	19.0	11.5	9.0	10.0	1.5	0.5	1.0	1.0	1.0	1.0
7	19.0	15.0	17.0	10.0	7.5	9.0	2.5	1.5	2.0	1.5	1.0	1.0
8	17.5	13.5	15.0	7.5	6.5	6.5	2.5	2.0	2.0	1.0	1.0	1.0
9	16.0	13.0	14.0	6.5	4.5	6.5	2.5	2.0	2.5	1.5	0.5	1.0
10	16.0	13.5	14.5	6.0	4.5	5.5	3.5	2.5	3.0	2.0	1.5	1.5
11	15.0	14.0	14.5	6.5	6.0	5.5	4.5	3.0	3.5	2.5	1.5	2.0
12	15.0	13.5	14.5	6.0	6.0	5.5	3.0	2.0	2.5	2.0	1.5	2.5
13	16.0	13.0	13.5	7.0	6.0	6.0	3.5	2.5	3.0	4.5	1.0	2.5
14	16.0	14.0	15.0	6.0	7.0	4.5	3.0	2.0	2.5	4.5	1.5	3.5
15	17.5	16.0	16.5	4.0	7.0	7.5	3.0	2.5	2.5	1.0	0.0	0.5
16	19.0	16.5	17.0	6.5	7.5	5.0	5.0	3.0	4.0	0.0	0.0	0.0
17	17.0	16.0	16.0	7.0	4.5	5.5	4.5	3.5	4.0	0.0	0.0	0.0
18	16.0	14.0	14.5	7.5	6.0	6.0	3.0	1.0	2.0	0.5	0.0	0.5
19	16.5	13.5	14.0	8.0	6.0	6.5	0.5	0.0	0.0	2.0	0.5	1.0
20	16.0	13.5	14.0	9.0	7.0	8.0	1.0	0.0	0.5	2.0	0.5	1.5
21	15.5	13.0	14.0	6.5	5.5	6.0	3.0	1.0	2.0	2.0	1.5	1.5
22	16.0	13.5	14.5	6.0	4.0	5.0	2.5	0.0	1.0	2.0	1.0	1.5
23	17.0	14.5	15.5	4.5	7.5	3.5	0.5	0.0	0.5	3.0	1.5	2.0
24	15.0	14.0	14.5	3.0	7.0	2.5	---	---	---	3.5	2.0	3.0
25	14.5	13.5	14.0	2.5	0.0	1.5	---	---	---	4.0	1.0	3.0
26	17.0	14.0	15.5	1.5	3.0	0.5	---	---	---	1.0	0.0	0.0
27	18.0	16.0	17.0	2.0	1.0	1.5	---	---	---	0.5	0.0	0.5
28	16.5	17.0	14.0	2.5	1.5	2.0	---	---	---	0.5	0.0	0.5
29	17.5	16.5	17.5	3.0	2.0	2.0	---	---	---	1.0	0.0	0.5
30	18.0	15.0	16.0	3.0	7.0	2.5	---	---	---	1.0	0.0	0.5
31	18.0	14.0	15.0	---	---	---	---	---	---	1.0	0.0	0.5
MONTH	23.5	13.0	16.0	19.0	9.0	8.5	---	---	---	4.5	0.0	1.5
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	0.0	3.5	4.5	1.5	3.0	7.0	3.5	5.0	16.5	12.5	15.0
2	1.0	0.5	1.0	3.5	2.5	3.0	6.0	5.0	5.0	15.5	13.5	14.5
3	1.0	0.0	3.5	3.0	0.5	1.0	5.5	4.0	5.0	13.5	12.5	13.0
4	1.0	0.0	3.5	1.5	7.0	1.0	5.0	3.5	4.0	12.5	12.0	12.5
5	0.5	0.0	3.5	1.5	3.5	1.0	6.0	2.5	4.5	12.0	11.0	11.5
6	3.5	0.0	0.5	1.5	0.0	0.5	5.5	4.0	5.0	---	---	---
7	1.0	0.0	0.5	2.0	0.5	1.0	5.0	3.0	4.0	---	---	---
8	0.5	0.0	0.5	1.5	0.5	1.5	5.0	2.5	4.5	---	---	---
9	1.0	0.0	3.5	2.0	3.5	1.0	6.0	3.0	4.5	---	---	---
10	1.0	0.0	3.5	3.0	3.0	1.5	6.0	4.0	5.0	---	---	---
11	1.0	0.0	0.5	3.0	1.0	2.0	6.0	4.5	5.0	---	---	---
12	1.5	0.0	3.5	---	---	---	7.0	4.0	5.5	---	---	---
13	1.5	0.5	1.0	---	---	---	7.0	4.5	5.5	---	---	---
14	---	---	---	---	---	---	6.5	4.5	5.5	---	---	---
15	---	---	---	---	---	---	6.5	5.5	5.5	---	---	---
16	---	---	---	---	---	---	5.0	5.0	7.0	---	---	---
17	2.0	1.0	1.5	---	---	---	10.5	7.5	9.0	---	---	---
18	2.5	1.0	1.5	---	---	---	12.0	9.0	10.0	---	---	---
19	1.5	0.0	0.5	---	---	---	14.5	10.0	12.5	---	---	---
20	0.5	0.0	0.0	---	---	---	13.5	8.0	11.0	---	---	---
21	0.5	3.0	0.0	3.5	2.0	2.5	10.0	7.0	8.5	---	---	---
22	1.0	3.0	0.5	3.5	2.0	2.5	9.5	6.0	9.0	---	---	---
23	0.5	3.0	0.5	3.0	1.5	2.5	10.0	8.0	8.5	---	---	---
24	1.0	0.0	3.5	3.0	7.0	2.5	10.5	9.0	10.0	---	---	---
25	1.5	0.5	1.0	4.0	2.0	2.5	12.0	9.0	10.5	---	---	---
26	1.0	0.5	0.5	4.0	1.5	2.5	12.0	9.5	10.5	---	---	---
27	1.5	0.5	1.0	3.5	1.5	2.5	11.0	9.5	10.0	---	---	---
28	2.5	0.5	2.0	4.5	1.5	3.0	12.0	8.5	10.0	---	---	---
29	3.5	2.0	3.0	5.5	2.5	4.0	14.0	10.0	12.0	---	---	---
30	---	---	---	4.5	4.0	4.0	13.0	10.5	13.0	---	---	---
31	---	---	---	4.0	3.5	4.0	---	---	---	---	---	---
MONTH	3.5	0.0	0.5	---	---	---	15.0	2.5	7.5	---	---	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

THAMES RIVER BASIN

319

01124750 BROWNS BROOK NEAR WEBSTER, MASS.

LOCATION.--Lat 42°03'24" Long 71°49'51", Worcester County, two-parameter monitor at gaging station on left bank 15 ft downstream from culvert on State Highway 16 and 1.6 miles east of Webster.

DRAINAGE AREA.--0.49 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1971 to September 1972.

Water temperatures: November 1971 to September 1972.

EXTREMES.--November 1971 to September 1972:

Specific conductance: Maximum, 132 micromhos Feb. 13; minimum, 42 micromhos July 19, 25.

Water temperatures: Maximum, 17.5°C Aug. 24; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), NOVEMBER 1971 TO SEPTEMBER 1972

DAY	NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	86	82	83	76	75	75
2	---	---	---	82	78	80	88	75	80
3	---	---	---	78	74	75	85	80	82
4	---	---	---	74	72	73	88	80	83
5	---	---	---	73	72	72	83	81	82
6	---	---	---	76	69	72	82	78	81
7	---	---	---	81	74	76	80	77	78
8	---	---	---	74	68	71	76	74	75
9	---	---	---	70	66	68	89	72	77
10	---	---	---	68	63	66	81	77	79
11	---	---	---	67	63	64	80	75	77
12	---	---	---	67	64	65	79	74	78
13	---	---	---	68	64	66	81	77	78
14	---	---	---	80	63	66	79	77	78
15	---	---	---	91	70	76	78	77	77
16	---	---	---	75	68	71	77	76	77
17	---	---	---	71	66	69	77	76	77
18	---	---	---	71	66	68	76	73	75
19	---	---	---	70	66	68	72	71	72
20	---	---	---	91	65	72	70	69	70
21	---	---	---	75	69	71	76	69	73
22	---	---	---	71	68	69	71	70	70
23	---	---	---	71	69	70	71	70	70
24	---	---	---	76	69	71	73	70	72
25	---	---	---	73	70	71	73	71	72
26	---	---	---	103	70	76	73	72	73
27	---	---	---	74	72	73	72	71	72
28	---	---	---	74	73	73	73	71	72
29	102	80	90	74	74	74	73	71	72
30	103	86	91	77	73	74	73	71	72
31	---	---	---	77	75	76	73	73	73
MONTH	---	---	---	103	63	72	89	69	76

THAMES RIVER BASIN

01124750 BROWNS BROOK NEAR WEBSTER, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), NOVEMBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	74	73	73	99	76	86	62	61	61	64	63	63
2	74	73	74	112	95	100	63	61	62	63	63	63
3	112	71	76	126	62	81	64	62	63	63	53	60
4	116	91	96	69	63	67	65	62	63	56	55	56
5	90	84	87	69	68	69	64	63	64	56	55	55
6	83	80	82	70	68	69	65	63	64	57	55	56
7	80	78	79	71	70	71	68	64	65	58	56	57
8	78	76	76	80	72	76	66	64	65	58	57	58
9	75	74	75	79	73	76	66	64	65	57	55	56
10	75	73	74	74	70	72	66	64	66	56	55	56
11	74	73	73	70	69	69	69	65	66	57	55	56
12	73	71	72	68	67	67	66	64	65	57	56	57
13	132	70	81	67	66	67	66	65	66	58	57	58
14	79	75	77	67	65	67	67	65	66	58	58	58
15	74	72	73	68	65	67	68	67	67	58	53	54
16	72	70	71	67	66	66	68	66	67	55	54	54
17	71	68	69	76	63	69	68	66	67	56	55	55
18	68	67	68	61	56	58	69	67	68	57	55	56
19	67	65	65	59	58	59	69	67	68	56	56	56
20	67	65	66	59	58	59	67	66	67	56	54	55
21	66	64	65	60	58	59	68	66	67	55	54	55
22	66	64	65	62	58	60	67	65	66	57	55	56
23	66	65	66	59	57	57	65	61	63	58	56	57
24	70	64	65	58	57	57	64	62	63	58	56	57
25	67	65	66	59	57	58	63	62	63	57	57	57
26	70	65	66	59	58	59	63	62	63	58	57	57
27	67	66	66	60	59	59	64	63	63	58	57	58
28	68	67	67	61	59	60	64	63	63	59	58	58
29	76	68	72	61	60	60	64	63	63	59	58	59
30	---	---	---	61	60	61	64	63	63	59	58	58
31	---	---	---	61	61	61	---	---	---	58	52	57
MONTH	132	64	73	126	56	67	69	61	65	64	52	57
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	53	51	52	49	48	49	55	55	55	69	64	66
2	53	52	52	49	48	49	56	55	55	68	64	65
3	54	53	53	49	48	48	56	56	56	65	54	59
4	54	53	53	49	48	48	57	56	56	61	58	60
5	53	52	52	49	48	48	58	57	57	63	61	62
6	53	53	53	48	48	48	58	56	57	64	63	64
7	53	53	53	48	48	48	57	56	57	64	63	64
8	54	53	53	49	48	48	56	55	56	66	63	64
9	54	53	53	48	47	48	57	56	56	65	64	65
10	52	51	52	48	47	48	58	56	57	67	65	67
11	52	51	52	49	48	48	58	57	58	67	64	66
12	53	52	52	48	48	48	59	57	58	68	64	66
13	53	52	53	48	46	47	59	57	58	68	65	66
14	53	52	52	47	46	47	59	57	58	69	63	67
15	53	52	52	48	47	47	60	56	57	65	62	64
16	53	53	53	48	47	48	60	59	60	68	64	66
17	53	51	52	48	47	47	59	58	59	67	64	66
18	53	53	53	48	47	48	59	58	58	66	65	66
19	52	51	51	48	42	47	60	58	59	66	50	57
20	52	51	52	45	43	44	63	60	61	59	55	57
21	52	51	52	45	44	45	63	62	63	59	58	58
22	51	49	50	47	45	46	64	63	63	59	54	58
23	51	49	50	46	45	46	65	63	64	60	59	60
24	50	49	49	46	45	45	66	60	64	60	59	59
25	50	49	50	46	42	46	63	61	62	62	59	61
26	49	49	49	54	53	54	64	62	63	62	61	62
27	50	49	49	55	54	55	63	63	63	63	61	62
28	50	49	50	56	55	55	63	62	63	62	60	61
29	50	49	50	56	55	55	64	62	63	61	59	60
30	50	46	49	56	55	56	66	63	64	59	58	59
31	---	---	---	56	55	56	67	63	65	---	---	---
MONTH	54	46	52	56	42	49	67	55	60	69	50	63
PERIOD	132	42	63									

THAMES RIVER BASIN

321

01124750 BROWNS BROOK NEAR WEBSTER, MASS.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972

DAY	NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	5.0	4.0	4.5	3.0	2.0	2.5
2	---	---	---	4.0	3.0	3.5	3.5	2.5	3.0
3	---	---	---	4.0	3.0	3.5	3.5	2.5	3.0
4	---	---	---	4.0	3.0	3.5	3.0	2.5	3.0
5	---	---	---	3.5	2.5	3.0	3.5	2.0	3.0
6	---	---	---	3.5	2.5	3.0	2.0	1.0	1.5
7	---	---	---	4.0	3.5	4.0	2.5	1.0	1.5
8	---	---	---	4.0	4.0	4.0	1.5	0.5	1.5
9	---	---	---	4.5	4.0	4.5	2.5	0.5	1.5
10	---	---	---	5.0	4.5	5.0	3.0	2.5	2.5
11	---	---	---	6.5	5.5	6.0	3.5	2.5	3.0
12	---	---	---	5.5	4.5	5.0	4.0	3.5	3.5
13	---	---	---	5.5	4.5	5.0	5.5	3.5	4.5
14	---	---	---	4.5	4.0	4.5	5.5	3.5	4.5
15	---	---	---	4.0	4.0	4.0	3.5	2.5	3.5
16	---	---	---	5.5	4.0	5.0	2.0	0.5	1.5
17	---	---	---	5.5	4.5	5.0	1.5	0.5	1.0
18	---	---	---	4.5	3.0	4.0	2.0	1.0	1.5
19	---	---	---	3.0	2.5	2.5	3.0	2.0	2.5
20	---	---	---	3.0	2.5	2.5	2.5	1.5	2.0
21	---	---	---	3.5	3.0	3.0	3.0	2.0	2.5
22	---	---	---	3.0	2.0	2.5	2.5	2.0	2.5
23	---	---	---	2.5	1.5	2.0	3.5	2.5	3.0
24	---	---	---	3.5	2.5	3.0	3.5	3.0	3.0
25	---	---	---	3.0	2.5	2.5	4.0	2.0	3.5
26	---	---	---	3.5	2.5	3.0	2.0	1.0	1.5
27	---	---	---	3.5	3.0	3.5	1.5	1.0	1.0
28	---	---	---	4.5	3.5	4.0	1.5	0.5	1.0
29	6.0	5.5	6.0	4.0	3.0	3.5	1.5	0.5	1.0
30	6.0	5.0	5.5	3.5	2.0	3.0	2.0	0.5	1.5
31	---	---	---	3.0	2.5	2.5	1.5	0.5	1.0
4MONTH	---	---	---	6.5	1.5	3.5	5.5	0.5	2.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	0.0	0.5	3.5	2.0	2.5	6.0	3.0	4.0	10.5	7.5	9.0
2	1.0	0.5	1.0	3.0	2.5	2.5	5.5	3.5	4.5	9.0	8.0	8.5
3	1.0	0.5	0.5	3.0	0.0	0.5	5.0	3.5	4.0	9.5	8.0	8.5
4	1.5	0.0	1.0	1.0	0.0	0.5	4.0	3.0	3.5	9.5	8.5	9.0
5	0.5	0.0	0.0	1.0	0.0	0.5	5.0	2.5	3.5	9.0	8.0	8.5
6	0.5	0.0	0.0	1.0	0.0	0.5	4.0	3.0	3.5	10.5	7.5	9.0
7	1.0	0.0	0.5	1.5	0.0	1.0	3.5	2.5	3.0	11.0	9.0	10.0
8	0.5	0.0	0.0	2.0	0.5	1.5	4.5	2.0	3.0	10.0	8.5	9.5
9	1.0	0.0	0.0	1.5	0.0	0.5	5.0	2.0	3.0	8.5	7.0	8.0
10	1.0	0.0	0.5	1.5	0.0	0.5	4.5	2.5	3.5	8.0	7.0	7.5
11	1.0	0.0	0.5	1.5	0.0	0.5	3.5	2.5	3.0	8.5	6.5	7.5
12	1.0	0.0	0.5	1.5	1.0	1.0	5.0	2.5	4.0	9.5	7.0	8.5
13	1.5	0.5	1.0	3.0	1.5	2.0	4.0	3.0	3.5	11.0	8.0	9.5
14	1.5	1.0	1.0	1.5	0.0	1.0	5.0	3.5	4.5	11.0	9.0	10.0
15	2.5	1.0	1.5	1.5	0.0	0.5	4.0	3.5	4.0	10.5	10.0	10.5
16	2.5	1.0	1.5	2.5	1.0	1.5	7.5	4.0	5.5	12.5	10.0	11.0
17	1.5	1.0	1.0	2.0	1.0	1.5	8.0	5.0	6.0	12.5	11.0	12.0
18	2.0	1.0	1.5	3.5	2.0	2.5	8.5	5.0	6.5	13.0	11.0	12.0
19	1.5	0.0	0.5	3.5	1.5	2.5	9.5	6.0	7.5	12.5	11.0	11.5
20	1.0	0.0	0.5	3.0	1.0	2.0	7.5	5.5	6.5	11.0	10.5	10.5
21	1.0	0.0	0.5	3.5	2.0	2.5	7.5	5.0	6.0	12.5	10.5	11.5
22	1.5	0.0	1.0	4.5	3.0	4.0	6.5	5.0	5.5	13.0	11.0	12.0
23	0.5	0.0	0.0	4.5	4.0	4.5	7.0	5.5	6.0	13.0	11.0	12.0
24	1.5	0.0	1.0	4.0	3.5	4.0	7.5	6.5	7.0	12.5	11.0	12.0
25	2.0	1.0	1.5	4.0	3.0	3.5	7.5	6.0	7.0	12.0	10.5	11.0
26	1.5	0.5	1.0	4.0	2.0	3.0	7.5	5.5	6.5	11.5	10.0	10.5
27	2.0	1.0	1.5	2.5	2.0	2.5	6.5	5.5	6.0	11.5	9.5	10.5
28	2.5	1.5	2.0	3.5	1.5	2.5	8.0	5.0	6.0	12.0	10.0	11.0
29	3.0	2.0	2.5	4.5	2.5	3.5	9.0	6.0	7.0	12.0	10.5	11.5
30	---	---	---	3.5	3.5	3.5	9.5	6.0	8.0	12.5	11.0	12.0
31	---	---	---	3.5	3.5	3.5	---	---	---	12.5	12.0	12.0
4MONTH	3.0	0.0	1.0	4.5	0.0	2.0	9.5	2.0	5.0	13.0	6.5	10.0

01124750 BROWNS BROOK NEAR WEBSTER, MASS.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972. —Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.5	12.5	12.5	13.5	13.0	13.5	15.5	15.0	15.0	16.5	15.0	15.5
2	12.0	12.0	12.0	14.0	13.0	13.5	16.0	15.0	15.5	16.0	15.5	16.0
3	12.5	11.5	12.0	14.0	13.5	14.0	16.0	15.0	15.5	16.0	15.0	15.5
4	13.0	12.0	12.5	14.0	13.5	13.5	16.5	15.0	15.5	15.0	14.5	15.0
5	12.5	12.0	12.5	13.5	12.5	13.0	15.5	14.0	15.0	15.0	14.0	14.5
6	12.5	11.5	12.0	13.0	12.5	13.0	15.5	14.0	14.5	15.0	13.5	14.0
7	12.0	12.0	12.0	13.0	12.5	13.0	15.5	14.5	15.0	15.0	13.5	14.5
8	12.0	11.5	11.5	13.5	12.5	13.0	16.0	15.0	15.5	15.5	14.0	14.5
9	12.5	11.5	12.0	15.0	12.5	14.0	16.0	15.0	15.5	15.5	14.0	14.5
10	12.5	11.5	12.0	14.5	14.0	14.0	15.5	14.0	15.0	14.0	13.0	13.5
11	11.5	10.5	11.0	14.5	13.5	14.0	15.0	13.5	14.0	14.5	12.5	13.5
12	11.0	10.0	10.5	14.5	13.5	14.0	15.0	14.0	14.5	15.0	13.5	14.5
13	11.5	11.0	11.0	14.5	14.0	14.5	15.5	14.5	15.0	14.5	14.0	14.5
14	12.0	11.0	11.5	16.5	14.5	16.0	15.5	14.5	15.0	15.5	14.5	15.0
15	13.0	12.0	12.5	17.0	13.5	16.0	15.0	14.0	14.5	14.5	14.0	14.5
16	13.0	12.5	13.0	16.5	15.0	15.5	15.0	13.5	14.0	15.0	14.0	14.5
17	13.5	12.5	13.0	16.0	15.5	15.5	14.5	14.0	14.0	16.0	14.0	15.0
18	13.0	12.5	13.0	16.0	15.0	15.5	15.0	14.0	14.5	16.5	15.0	15.5
19	12.5	12.5	12.5	17.0	15.5	16.0	15.5	14.5	15.0	16.0	14.5	15.5
20	13.0	12.5	12.5	16.0	13.5	16.0	16.0	14.5	15.0	14.5	13.5	14.0
21	13.5	13.0	13.0	16.0	15.5	15.5	16.0	14.5	15.0	14.0	13.0	13.5
22	13.5	13.0	13.5	16.5	15.5	16.0	16.5	14.5	15.5	14.5	13.5	14.0
23	13.5	13.0	13.0	16.5	15.5	16.0	16.5	15.0	15.5	13.5	12.5	13.0
24	13.0	12.5	13.0	17.0	16.0	16.0	17.5	15.5	16.0	13.5	12.5	13.0
25	12.5	12.5	12.5	17.0	15.5	16.0	16.5	16.0	16.5	14.5	13.5	14.0
26	13.0	12.5	12.5	16.0	15.5	16.0	17.0	16.0	16.5	15.5	14.5	15.0
27	13.0	12.5	13.0	16.0	15.0	15.5	16.5	16.0	16.5	16.0	15.0	15.5
28	13.5	12.5	13.0	16.0	15.0	15.5	17.0	16.5	16.5	15.0	13.0	14.0
29	14.0	13.0	13.5	15.5	15.0	15.5	17.0	16.0	16.5	14.0	13.0	13.5
30	13.5	13.0	13.5	15.5	14.5	15.0	17.0	15.0	16.0	15.0	13.5	14.5
31	---	---	---	15.5	15.0	15.0	16.5	14.5	15.5	---	---	---
MONTH	14.0	10.0	12.5	17.0	12.5	15.0	17.5	13.5	15.5	16.5	12.5	14.5
PERIOD	17.5	0.0	8.0									

CONNECTICUT RIVER BASIN

323

01141900 CONNECTICUT RIVER AT WILDER, VT.

LOCATION.--Lat 43°40'04", long 72°18'13", Windsor County, at Wilder Dam at Wilder.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1972.

REMARKS.--Additional chemical analyses for this station in radiochemical and pesticide tables and in table of composited samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT.								
05...	1200	4050	112	6.1	6.8	17.0	21.0	360
NOV.								
01...	1630	4200	112	6.6	6.8	13.7	15.3	57
DEC.								
06...	1700	8800	125	6.8	7.2	1.5	-1.0	77
JAN.								
03...	1400	4500	112	12.5	7.2	.5	4.2	140
FEB.								
07...	1700	4300	124	13.4	6.6	.0	--	500
MAR.								
07...	1000	4100	128	--	6.9	.0	.0	230
APR.								
03...	1600	9900	104	11.6	6.7	2.0	5.3	190
MAY								
01...	1330	19300	83	12.7	7.0	5.9	24.3	73
JUNE								
13...	1100	7500	82	9.0	6.9	14.0	24.0	600
JULY								
11...	1030	8700	108	7.7	7.1	19.5	22.5	980
AUG.								
08...	1100	8900	90	7.4	8.3	20.0	27.5	1100
SEP.								
12...	1600	4200	101	5.8	7.0	20.0	23.0	560

DATE	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METH- YLENE BLUE ACTIVE SUB- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)	TUR- BID- ITY (JTU)
OCT.								
05...	4	.40	.76	.030	.05	25	28	2
NOV.								
01...	82	.40	.84	.020	.04	30	.6	3
DEC.								
06...	17	.27	.70	.030	.06	29	2.9	2
JAN.								
03...	51	.20	1.4	.024	.10	33	.4	5
FEB.								
07...	91	.40	.68	.001	.07	26	.8	4
MAR.								
07...	56	.40	.70	.020	.03	26	.7	3
APR.								
03...	31	.40	.76	.028	.04	29	.0	5
MAY								
01...	15	.30	.24	.025	.02	22	.0	6
JUNE								
13...	27	.20	.56	.027	.03	16	.4	2
JULY								
11...	9	.20	.37	.022	.04	19	2.8	2
AUG.								
08...	120	.20	.32	.017	.03	12	4.7	3
SEP.								
12...	3	.20	.35	.019	.03	11	1.8	2

E Estimated.

CONNECTICUT RIVER BASIN

01141900 CONNECTICUT RIVER AT WILDER, VT.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (MG) (UG/L)
SEP. 12...	130	60	11	1.4	4.1	1.0	0	11	<.5

DATE	RICAP-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)
SEP. 12...	38	10	5.0	.1	.005	.02	6.1	31	0

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 100 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	COLOR (PLATINUM- COPALY UNITS)
SEP. 12...	38	7	1.5	.01	.0	5	64	54	25

CONNECTICUT RIVER BASIN

325

01160000 SOUTH BRANCH ASHLEOT RIVER AT WEBB, NEAR MARLBOROUGH, N.H.

LOCATION.--Lat 42°52'20", long 72°12'51", Cheshire County, temperature recorder at gaging station on right bank 15 ft downstream from bridge, at Webb, 2.5 miles south of Marlborough.

DRAINAGE AREA.--36.0 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1954 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 25.5° C Aug. 26; minimum, freezing point on many days during winter period.

Period of record:

Water temperatures: Maximum, 33.5° C July 14, 1965; minimum, freezing point on many days during winter periods.

REMARKS.--Recorder stopped Nov. 15-23 (range in temperature, 5.5° C to 0.5° C); recorder inoperative Apr. 19 to May 14 (range in temperature, 0° C to 19.5° C).

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	13.5	---	13.5	10.5	---	1.5	0.5	---	3.0	0.5	---
2	17.0	13.0	---	13.0	12.0	---	4.0	0.5	---	1.0	0.0	---
3	16.0	14.0	---	13.0	10.5	---	3.5	0.0	---	1.0	0.0	---
4	14.5	11.5	---	10.5	8.5	---	1.5	0.5	---	1.0	0.5	---
5	16.5	13.5	---	8.5	6.0	---	3.0	0.5	---	1.0	0.0	---
6	15.5	13.5	---	7.0	5.0	---	1.5	1.5	---	1.0	0.5	---
7	14.0	11.5	---	8.0	5.0	---	2.0	0.5	---	0.5	0.0	---
8	12.0	9.5	---	5.5	4.5	---	0.5	0.5	---	0.5	0.0	---
9	11.5	9.0	---	4.5	3.5	---	1.5	0.5	---	1.5	0.0	---
10	12.0	11.5	---	4.0	3.5	---	1.5	1.0	---	0.5	0.0	---
11	12.0	12.0	---	4.0	4.0	---	1.5	1.0	---	0.0	0.0	---
12	12.0	11.5	---	4.0	3.5	---	1.5	1.5	---	0.0	0.0	---
13	12.0	10.5	---	4.0	3.0	---	1.5	1.0	---	0.5	0.0	---
14	13.5	11.5	---	3.5	2.0	---	1.5	1.0	---	0.0	0.0	---
15	15.0	13.0	---	---	---	---	1.5	1.5	---	0.0	0.0	---
16	14.5	12.0	---	---	---	---	1.5	1.5	---	0.0	0.0	---
17	14.0	12.0	---	---	---	---	1.5	1.5	---	1.0	0.0	---
18	12.0	10.5	---	---	---	---	1.5	0.5	---	1.5	0.0	---
19	11.5	9.5	---	---	---	---	3.0	0.5	---	0.5	0.0	---
20	12.0	10.5	---	---	---	---	1.0	0.5	---	1.0	0.0	---
21	11.5	9.0	---	---	---	---	1.0	0.0	---	0.5	0.0	---
22	11.5	9.5	---	---	---	---	1.5	0.0	---	1.5	0.0	---
23	13.0	11.0	---	---	---	---	3.0	0.0	---	0.5	0.0	---
24	12.0	11.0	---	2.0	0.5	---	1.0	0.0	---	0.5	0.0	---
25	11.0	11.0	---	3.0	0.5	---	1.0	0.0	---	0.5	0.0	---
26	13.0	11.0	---	1.5	0.5	---	1.0	0.0	---	0.5	0.0	---
27	13.0	11.0	---	2.0	1.0	---	1.0	0.0	---	0.5	0.0	---
28	15.0	13.0	---	2.0	1.5	---	1.0	0.5	---	0.5	0.5	---
29	13.5	11.0	---	2.0	1.0	---	1.0	0.5	---	1.0	0.5	---
30	12.0	9.5	---	1.5	1.0	---	1.0	0.0	---	1.0	0.5	---
31	11.0	10.5	---	---	---	---	1.0	0.0	---	1.0	0.5	---
MEAN	17.0	9.0	---	---	---	---	4.0	0.0	---	3.0	0.0	---

CONNECTICUT RIVER BASIN

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, N. H.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
2	1.0	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
3	0.5	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
4	0.5	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
5	0.5	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
6	0.5	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
7	0.5	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
8	1.0	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
9	1.0	0.5	---	0.0	0.0	---	0.0	0.0	---	---	---	---
10	1.0	0.5	---	0.0	0.0	---	0.5	0.0	---	---	---	---
11	0.5	0.5	---	0.0	0.0	---	0.5	0.0	---	---	---	---
12	1.0	0.5	---	0.0	0.0	---	1.0	0.5	---	---	---	---
13	0.5	0.0	---	0.0	0.0	---	1.0	0.5	---	---	---	---
14	0.5	0.0	---	0.0	0.0	---	0.5	0.5	---	---	---	---
15	0.5	0.0	---	0.0	0.0	---	0.5	0.5	---	15.0	14.0	---
16	0.5	0.0	---	0.0	0.0	---	1.5	0.5	---	16.0	14.5	---
17	0.0	0.0	---	0.0	0.0	---	1.5	1.0	---	18.0	15.0	---
18	0.5	0.0	---	0.0	0.0	---	2.0	1.0	---	16.0	14.5	---
19	0.5	0.0	---	0.0	0.0	---	---	---	---	16.0	15.5	---
20	0.5	0.0	---	0.0	0.0	---	---	---	---	15.5	15.0	---
21	0.5	0.0	---	0.5	0.0	---	---	---	---	19.5	15.0	---
22	0.0	0.0	---	0.5	0.0	---	---	---	---	18.5	16.0	---
23	0.5	0.0	---	0.0	0.0	---	---	---	---	21.5	16.5	---
24	0.0	0.0	---	0.0	0.0	---	---	---	---	18.5	16.5	---
25	0.0	0.0	---	0.0	0.0	---	---	---	---	18.5	16.0	---
26	0.0	0.0	---	0.0	0.0	---	---	---	---	18.5	16.0	---
27	0.0	0.0	---	0.0	0.0	---	---	---	---	18.5	16.0	---
28	0.0	0.0	---	0.0	0.0	---	---	---	---	19.5	16.0	---
29	0.0	0.0	---	0.0	0.0	---	---	---	---	20.5	17.0	---
30	---	---	---	0.5	0.0	---	---	---	---	20.5	16.5	---
31	---	---	---	0.5	0.0	---	---	---	---	20.0	17.0	---
MONTH	1.0	0.0	---	0.5	0.0	---	---	---	---	22.0	18.5	---
JUN.												
JULY												
AUGUST												
SEPTEMBER												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	17.0	---	16.5	16.0	---	21.0	18.0	---	22.0	16.0	19.0
2	17.0	16.0	---	19.5	15.5	---	20.5	18.0	---	20.5	17.0	19.0
3	20.0	15.5	---	19.5	16.0	---	21.0	18.5	---	19.0	17.0	18.5
4	18.5	16.5	---	18.5	16.5	---	22.0	18.5	---	17.5	16.0	16.5
5	18.5	16.0	---	16.5	15.5	---	23.0	16.0	---	19.5	13.0	16.0
6	16.0	15.5	---	16.5	15.0	---	22.0	16.5	---	19.0	12.0	15.5
7	15.5	15.5	---	18.5	15.0	---	19.5	18.0	19.0	19.5	12.0	15.5
8	15.5	14.5	---	20.0	15.5	---	20.0	17.5	19.0	19.0	13.5	16.5
9	15.5	14.5	---	20.5	16.0	---	20.0	17.0	18.5	19.5	15.0	17.5
10	15.5	14.5	---	19.5	17.0	---	18.5	16.0	17.5	16.5	11.5	14.0
11	14.5	14.0	---	21.5	17.0	---	19.5	14.0	16.5	16.5	10.5	13.5
12	15.0	13.5	---	23.5	17.0	---	19.0	15.5	17.0	18.0	13.0	15.0
13	15.0	14.5	---	20.5	17.0	---	21.5	16.5	19.0	15.0	13.0	14.5
14	16.5	14.5	---	21.5	18.5	---	19.0	16.5	17.0	16.5	14.0	15.5
15	20.0	16.0	---	23.0	18.5	---	20.0	15.5	17.5	17.0	11.5	14.0
16	17.0	16.0	---	23.0	20.0	---	19.5	13.5	16.5	17.5	11.5	14.0
17	18.0	15.5	---	21.5	18.5	---	18.5	15.5	17.0	19.5	13.0	16.0
18	21.0	16.0	---	19.5	18.5	---	18.5	16.0	17.0	20.5	16.0	18.0
19	17.0	16.5	---	23.5	18.5	---	22.0	16.0	18.5	18.5	15.5	17.0
20	18.0	16.5	---	23.0	19.0	---	21.5	14.5	18.0	17.0	13.0	14.5
21	19.0	16.5	---	21.5	19.0	---	21.5	14.5	18.0	13.5	10.0	12.0
22	20.0	18.0	---	21.5	19.0	---	22.5	15.5	19.0	18.0	13.0	14.5
23	18.0	16.0	---	24.0	20.0	---	23.0	16.5	19.5	15.0	10.0	12.0
24	16.5	15.5	---	23.0	20.5	---	23.0	19.0	21.0	13.0	10.0	11.5
25	15.5	15.0	---	23.0	21.0	---	25.0	20.0	22.0	16.0	13.0	14.0
26	15.5	15.0	---	22.0	20.0	---	25.5	20.0	22.5	17.5	13.5	15.0
27	16.5	15.0	---	21.5	18.0	---	22.0	20.5	21.0	18.5	15.5	16.5
28	19.5	15.5	---	23.0	18.5	---	22.0	19.5	20.5	16.0	12.0	13.5
29	19.5	16.5	---	23.0	19.0	---	22.0	18.0	19.5	13.5	10.5	12.0
30	18.5	16.0	---	23.0	18.0	---	22.0	17.0	19.0	16.5	13.0	14.0
31	---	---	---	20.5	17.0	---	22.0	15.5	18.5	---	---	---
MONTH	21.0	13.5	---	24.0	15.0	---	25.5	13.5	19.0	22.0	10.0	15.0
YEAR	25.5	0.0	17.0									

CONNECTICUT RIVER BASIN

327

01161200 CONNECTICUT RIVER AT NORTHFIELD, MASS.

LOCATION.--Lat 42°42'44", long 72°27'14", Franklin County, at bridge on State Highway 142, at Northfield, 1.1 miles downstream from Massachusetts-New Hampshire State line.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1972.

REMARKS.--Additional chemical analyses for this station in radiochemical and pesticide tables and in table of composited samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	IMME- DIATE COLI- FORM COL PER 100 ML
OCT.								
05...	1800	4280	134	8.6	7.2	18.5	17.7	2700
NOV.								
02...	1200	11600	128	7.9	7.1	14.0	11.3	7000
APR.								
04...	1000	18500	112	14.1	6.6	1.0	2.4	1000
MAY								
01...	1700	45700	81	13.3	7.0	7.8	17.2	1200
JUNE								
13...	1600	12000	100	9.5	7.3	17.0	23.0	570
JULY								
12...	0900	--	117	9.3	7.4	20.5	19.0	27000
AUG.								
08...	1500	8860	110	8.3	7.4	22.5	25.0	55033
SEP.								
13...	1000	8500	130	7.9	7.4	20.5	19.0	--

DATE	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METH- YLENE BLUE ACTIVE SUB- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)	TUR- BID- ITY (JTU)
OCT.								
05...	11	.40	.62	.040	.05	15	53	3
NOV.								
02...	80	.40	.51	.040	.04	24	1.0	5
APR.								
04...	--	.40	.43	.030	.03	18	.8	6
MAY								
01...	43	.30	.16	.036	.02	10	.0	8
JUNE								
13...	38	.20	.73	.037	.03	19	2.1	4
JULY								
12...	18	.20	.65	.049	.04	13	4.2	9
AUG.								
08...	52	.20	.38	.029	.03	11	3.6	6
SEP.								
13...	110	.20	.46	.028	.03	9	4.4	4

CONNECTICUT RIVER BASIN

01161200 CONNECTICUT RIVER AT NORTHFIELD, MASS.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTASSIUM (K) (MG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (MG) (UG/L)
SEP. 13...	60	0	17	1.8	5.3	1.4	30	7	<.5

DATE	RICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED AMMONIA NITROGEN (N) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)
SEP. 13...	47	10	8.0	.1	.006	.02	3.0	39	0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CARBONATE HARD- NESS (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUSPENDED MATTER) (MG/L)	COLOR (PLATINUM- COBALT UNITS)
SEP. 13...	50	11	1.2	.01	.0	12	74	68	20

CONNECTICUT RIVER BASIN

329

01173260 MOOSE BROOK NEAR BARRE, MASS.

LOCATION.--Lat 42°23'52", long 72°08'51", Worcester County, two-parameter monitor at gaging station on right bank 20 ft upstream from culvert on Hardwick Road and 2.7 miles southwest of Barre.

DRAINAGE AREA.--4.54 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1971 to September 1972.
Water temperatures: November 1971 to September 1972.

EXTREMES.--November 1971 to September 1972:

Specific conductance: Maximum, 98 micromhos Feb. 5; minimum, 40 micromhos July 9.

Water temperatures: Maximum, 27.0°C July 19; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), NOVEMBER 1971 TO SEPTEMBER 1972

DAY	NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	66	61	64	69	68	69
2	---	---	---	67	66	66	68	66	68
3	---	---	---	68	66	67	71	64	66
4	---	---	---	66	66	66	72	70	71
5	---	---	---	67	66	67	69	67	68
6	---	---	---	68	64	67	69	67	68
7	---	---	---	65	56	60	68	67	67
8	---	---	---	68	66	67	67	66	67
9	---	---	---	66	63	64	68	65	67
10	---	---	---	63	60	61	75	63	68
11	---	---	---	61	58	60	76	70	73
12	---	---	---	61	58	60	70	67	68
13	---	---	---	59	58	58	67	60	65
14	---	---	---	59	58	58	62	59	60
15	---	---	---	58	57	58	65	62	63
16	---	---	---	60	57	58	68	65	66
17	---	---	---	63	62	63	68	67	68
18	---	---	---	63	62	62	68	64	66
19	---	---	---	66	64	65	64	61	62
20	---	---	---	65	63	64	64	62	63
21	---	---	---	64	63	64	64	63	63
22	60	59	60	67	64	65	64	64	64
23	64	60	62	70	69	69	64	63	64
24	66	64	65	70	62	67	63	62	63
25	63	61	62	74	64	71	65	62	63
26	62	60	61	75	70	72	72	66	70
27	60	60	60	72	70	71	73	71	72
28	60	59	59	72	69	70	71	69	70
29	59	57	58	70	69	70	69	66	67
30	61	55	57	70	69	69	67	65	66
31	---	---	---	69	67	68	67	66	67
4CNTH	---	---	---	75	56	65	76	59	67

CONNECTICUT RIVER BASIN

01173260 MOOSE BROOK NEAR BARRE, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), NOVEMBER 1971 TO SEPTEMBER 1972. --Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	68	66	67	69	65	68	52	50	52	52	51	52
2	67	66	66	94	70	81	51	50	51	52	51	52
3	67	64	65	93	73	79	50	50	50	53	51	52
4	65	61	63	77	74	75	50	49	50	54	50	52
5	98	67	89	76	73	75	51	50	50	53	52	53
6	94	60	87	73	69	71	52	50	51	52	49	50
7	80	72	75	69	61	66	52	51	52	50	51	50
8	72	71	71	70	62	65	52	50	51	49	48	48
9	71	69	70	77	70	74	51	50	50	51	48	48
10	69	68	69	74	68	71	52	50	51	51	51	51
11	68	67	68	70	65	67	53	52	52	51	50	50
12	70	68	69	65	64	65	54	53	54	50	49	49
13	69	59	57	69	60	67	54	52	53	50	49	49
14	95	66	84	72	65	70	55	52	54	49	49	49
15	88	74	79	---	---	---	54	51	52	51	45	47
16	76	69	72	---	---	---	51	50	51	51	50	50
17	71	67	69	---	---	---	50	48	49	49	48	49
18	68	65	67	---	---	---	47	45	46	50	47	49
19	65	63	64	---	---	---	46	44	45	50	47	48
20	66	63	64	52	51	52	45	44	45	47	45	46
21	67	64	66	53	51	52	47	45	46	48	45	46
22	64	63	63	54	47	51	47	47	47	49	48	48
23	64	63	64	51	48	50	50	46	48	48	46	47
24	64	63	63	50	49	49	51	50	50	46	46	46
25	63	62	62	51	49	50	52	50	51	46	45	45
26	63	62	62	52	50	51	51	50	51	45	44	45
27	64	63	63	54	52	53	51	50	50	45	44	45
28	63	61	63	55	52	54	51	49	50	45	44	45
29	64	62	63	54	51	53	51	50	51	46	45	46
30	---	---	---	53	52	53	51	50	51	46	46	46
31	---	---	---	53	52	52	---	---	---	47	43	46
MONTH	98	59	69	94	47	62	55	44	50	54	43	48

JUNE			JULY			AUGUST			SEPTEMBER			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	50	42	46	50	46	48	56	53	55	54	53	54
2	47	45	45	51	49	50	54	52	53	54	52	53
3	45	44	45	51	45	49	53	52	52	54	53	53
4	45	44	45	47	44	45	53	51	52	55	53	54
5	45	44	44	46	41	43	53	50	52	54	52	54
6	45	44	45	42	41	41	53	51	52	54	52	53
7	45	44	45	42	41	41	53	51	52	53	51	52
8	47	45	46	42	41	42	55	53	54	53	51	52
9	49	45	47	42	40	41	53	52	52	53	50	52
10	49	46	47	44	42	43	53	50	52	53	50	51
11	46	44	45	46	44	45	52	49	51	53	50	51
12	44	42	43	47	45	46	52	51	52	53	50	51
13	42	41	42	47	45	46	54	52	53	54	51	53
14	42	41	41	48	44	45	55	53	54	56	54	55
15	42	41	41	53	48	51	54	53	54	55	53	54
16	43	41	42	53	52	52	54	51	53	54	51	53
17	45	43	44	54	52	53	53	49	51	56	52	54
18	47	45	46	54	52	53	52	49	50	55	53	54
19	47	46	46	54	51	53	53	51	52	54	52	53
20	46	44	45	52	50	51	52	48	51	55	53	54
21	48	46	47	60	53	58	52	50	51	54	49	53
22	48	46	48	59	57	58	53	50	51	55	50	52
23	49	46	47	58	56	57	54	51	52	55	52	53
24	49	47	48	57	55	56	54	52	53	55	52	54
25	49	47	48	56	54	55	54	53	54	56	53	55
26	48	47	47	55	53	54	54	54	55	56	53	55
27	49	44	48	56	53	55	58	55	56	55	53	54
28	50	48	49	55	54	54	56	54	56	54	51	52
29	49	48	49	55	53	54	54	54	55	52	50	51
30	49	46	48	55	54	54	55	54	55	57	53	55
31	---	---	---	55	53	54	54	53	54	---	---	---
MONTH	50	41	46	60	40	50	58	48	53	57	49	53
PERIOD	98	40	56									

CONNECTICUT RIVER BASIN

331

01173260 MOOSE BROOK NEAR BARRE, MASS.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972

NOVEMBER				DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0
2	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0
3	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
4	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
5	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
6	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
7	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
8	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0
9	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
10	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
11	---	---	---	1.0	0.0	0.5	0.5	0.0	0.0
12	---	---	---	0.5	0.0	0.0	0.5	0.0	0.5
13	---	---	---	1.0	0.0	0.5	0.5	0.0	0.5
14	---	---	---	0.5	0.0	0.5	0.5	0.0	0.5
15	---	---	---	0.5	0.0	0.5	0.5	0.0	0.5
16	---	---	---	2.5	0.5	1.5	0.5	0.0	0.0
17	---	---	---	1.5	0.5	1.5	0.5	0.0	0.0
18	---	---	---	0.5	0.0	0.5	0.5	0.0	0.5
19	---	---	---	0.5	0.0	0.5	0.5	0.0	0.5
20	---	---	---	0.5	0.0	0.5	0.5	0.0	0.5
21	---	---	---	0.5	0.5	0.5	0.5	0.0	0.5
22	2.0	1.0	1.5	0.5	0.0	0.5	0.5	0.0	0.0
23	1.0	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5
24	1.0	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5
25	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.5
26	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5
27	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5
28	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
29	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
30	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
31	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
MONTH	---	---	---	2.5	0.0	0.5	0.5	0.0	0.0

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.2	0.5	0.0	0.0	1.0	0.0	1.0	15.0	10.0	12.5
2	0.5	0.0	0.5	0.5	0.0	0.0	1.5	0.0	0.5	14.0	10.0	12.0
3	0.5	0.0	0.5	0.5	0.0	0.0	2.0	0.0	1.0	9.5	8.5	9.0
4	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	9.5	8.0	9.0
5	0.5	0.0	0.5	0.0	0.0	0.0	2.5	0.0	1.0	10.5	8.0	9.0
6	0.5	0.0	0.5	0.5	0.0	0.0	2.5	0.0	1.5	13.0	7.5	10.5
7	0.5	0.0	0.5	0.5	0.0	0.5	1.0	0.0	0.0	13.5	10.0	12.0
8	0.5	0.0	0.5	0.5	0.0	0.5	2.0	0.0	0.5	12.0	9.0	10.5
9	0.5	0.0	0.3	0.5	0.0	0.0	3.5	0.0	1.5	9.0	7.0	8.0
10	0.5	0.0	0.5	0.5	0.0	0.0	4.5	0.5	2.5	9.5	6.5	8.0
11	0.5	0.0	0.2	0.5	0.0	0.0	2.5	1.0	2.0	9.0	6.5	8.0
12	0.5	0.0	0.5	0.5	0.0	0.0	5.5	0.5	3.0	11.5	6.5	9.0
13	0.5	0.0	0.2	0.5	0.0	0.5	3.0	0.5	1.5	15.0	8.5	12.0
14	0.5	0.0	0.5	0.5	0.0	0.0	4.0	0.5	2.0	14.5	11.5	13.0
15	0.5	0.0	0.5	---	---	---	2.5	1.5	2.0	13.5	12.5	13.0
16	0.5	0.0	0.5	---	---	---	7.0	1.5	4.0	17.5	12.5	15.0
17	0.5	0.0	0.5	---	---	---	8.5	3.5	6.0	17.0	15.5	16.0
18	0.5	0.0	0.5	---	---	---	9.0	4.0	6.5	18.5	14.0	16.5
19	0.5	0.0	0.2	---	---	---	10.5	6.0	8.0	17.0	14.0	15.5
20	0.0	0.0	0.0	0.0	0.0	0.0	9.0	3.5	6.0	14.0	13.0	13.5
21	0.0	0.0	0.2	0.0	0.0	0.0	9.0	2.0	5.0	18.5	12.5	15.5
22	0.5	0.0	0.0	0.0	0.0	0.0	7.0	4.0	5.5	20.5	15.5	18.0
23	0.0	0.0	0.0	0.0	0.0	0.0	7.5	5.0	6.0	20.5	15.0	18.0
24	0.0	0.0	0.2	0.5	0.0	0.0	8.5	6.0	7.5	19.5	15.5	17.5
25	0.5	0.0	0.2	0.0	0.0	0.0	11.0	5.5	8.0	18.0	14.0	16.5
26	0.5	0.0	0.2	0.5	0.0	0.0	10.5	5.5	8.0	17.0	12.0	15.0
27	0.5	0.0	0.5	0.0	0.0	0.0	9.0	4.0	7.0	18.0	12.5	16.0
28	0.5	0.0	0.5	0.5	0.0	0.0	10.0	4.5	7.5	19.5	14.5	17.5
29	0.5	0.0	0.5	1.5	0.0	0.5	12.0	6.5	9.5	20.5	16.0	18.5
30	---	---	---	0.0	0.0	0.0	13.0	7.5	10.5	19.0	17.0	18.5
31	---	---	---	0.5	0.0	0.0	---	---	---	19.0	16.5	18.0
MONTH	0.5	0.0	0.5	1.5	0.0	0.0	13.0	0.0	4.0	20.5	6.5	13.5

CONNECTICUT RIVER BASIN

01173260 MOOSE BROOK NEAR BARRE, MASS. --Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1971 TO SEPTEMBER 1972. --Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.0	15.5	16.0	19.0	15.5	16.5	23.5	18.0	20.5	21.5	16.0	18.5
2	17.0	14.5	16.0	22.0	16.5	19.5	22.0	18.0	20.0	20.0	17.0	18.5
3	20.0	15.0	17.5	21.5	19.5	20.0	22.5	19.0	20.5	18.5	16.0	17.5
4	20.5	17.0	18.5	20.5	17.5	19.0	24.0	17.0	20.5	18.0	15.5	16.5
5	17.5	17.5	19.0	18.0	16.0	16.5	22.5	15.0	18.5	20.0	13.0	16.0
6	19.0	15.5	17.0	18.0	15.0	16.5	22.0	15.5	18.5	19.5	12.5	15.5
7	17.5	16.0	17.0	19.0	15.0	17.0	19.0	17.0	18.0	19.5	12.5	15.5
8	16.0	14.0	15.0	20.5	16.5	18.5	22.5	18.0	19.5	19.5	13.5	16.5
9	18.5	14.5	16.5	21.0	16.5	19.0	20.5	17.0	18.5	17.5	14.0	16.0
10	17.0	14.5	16.0	20.5	18.0	19.5	23.0	15.5	17.5	17.5	12.0	14.5
11	15.5	12.5	14.0	22.5	19.0	21.0	20.5	14.0	17.0	17.0	11.0	14.0
12	15.0	12.0	13.5	24.0	20.0	22.5	18.5	15.0	17.0	18.0	13.0	15.5
13	17.0	12.5	15.0	23.0	20.5	22.0	22.5	16.5	19.0	15.5	13.5	15.0
14	19.0	15.0	17.0	24.0	20.0	22.0	19.0	16.0	17.5	17.5	15.0	16.0
15	20.0	17.0	18.5	25.0	22.0	24.0	20.5	15.0	17.5	17.0	13.0	15.0
16	19.5	18.0	19.5	24.5	23.5	24.0	19.5	13.5	16.5	18.0	13.0	15.0
17	20.5	17.0	19.5	24.0	23.5	25.0	17.5	15.0	16.5	19.5	13.5	16.5
18	20.5	17.5	19.0	24.0	23.0	24.5	19.0	15.5	17.0	21.0	16.0	18.5
19	19.0	16.5	17.5	27.0	24.0	26.0	22.0	16.0	18.5	18.0	15.5	17.0
20	19.0	16.0	17.5	24.5	22.5	23.5	22.0	15.0	18.0	17.5	13.5	15.0
21	20.5	17.5	19.0	23.5	21.5	23.0	21.5	14.5	18.0	14.0	12.0	13.0
22	19.5	16.5	18.5	25.0	23.0	24.0	22.5	15.5	19.0	18.0	13.0	15.0
23	17.0	16.0	16.5	25.5	23.0	24.5	22.5	16.5	19.5	16.5	11.5	13.5
24	17.0	15.0	16.0	26.0	23.0	24.5	23.0	18.5	20.5	14.5	11.0	13.0
25	16.0	15.0	15.5	25.0	21.5	23.0	24.0	19.5	21.5	17.0	13.5	15.0
26	15.5	14.5	15.0	23.5	20.0	22.0	25.0	19.5	22.0	18.0	15.0	16.5
27	19.5	15.0	17.0	23.5	19.5	21.5	21.5	20.0	20.5	19.5	16.5	18.0
28	20.5	16.0	18.5	23.5	19.0	21.0	23.5	20.0	21.5	17.5	13.5	15.5
29	21.0	17.0	19.5	24.5	19.5	21.5	23.0	18.0	20.5	14.5	12.0	13.5
30	20.5	15.0	17.5	24.0	19.0	21.0	22.0	17.0	19.5	16.0	13.5	14.5
31	---	---	---	21.5	17.5	19.5	22.0	15.5	18.5	---	---	---
MONTH	21.0	12.0	17.0	27.0	15.0	21.5	25.0	13.5	19.0	21.5	11.0	15.5
PERIOD	27.0	0.0	9.0									

CONNECTICUT RIVER BASIN

333

01174000 HOP BROOK NEAR NEW SALEM, MASS.

LOCATION.--Lat 42°28'42", long 72°20'05", Franklin County, two-parameter monitor at gaging station on right bank 1.5 miles upstream from mouth and 1.5 miles south of New Salem.

DRAINAGE AREA.--3.39 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1971 to September 1972.
Water temperatures: December 1971 to September 1972.

EXTREMES.--December 1971 to September 1972:

Specific conductance: Maximum, 195 micromhos Aug. 16, minimum, 43 micromhos June 1.
Water temperatures: Maximum, 22.0° C July 19; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), DECEMBER 1971 TO SEPTEMBER 1972

DECEMBER				JANUARY			DECEMBER				JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	83	78	79	16	---	---	---	97	91	95
2	---	---	---	97	72	81	17	---	---	---	97	90	94
3	---	---	---	98	88	90	18	80	78	79	90	85	87
4	---	---	---	88	82	85	19	84	78	81	85	81	82
5	---	---	---	92	83	86	20	81	77	79	82	79	81
6	---	---	---	94	85	90	21	84	81	83	85	79	83
7	---	---	---	86	78	83	22	85	82	83	85	81	82
8	---	---	---	83	81	81	23	87	79	83	82	77	80
9	---	---	---	86	73	80	24	80	70	75	90	79	83
10	---	---	---	86	77	80	25	74	73	73	90	75	81
11	---	---	---	82	80	81	26	82	71	74	86	78	82
12	---	---	---	88	82	84	27	79	75	77	88	83	86
13	---	---	---	88	76	83	28	85	75	79	86	82	84
14	---	---	---	84	74	80	29	79	77	78	84	81	82
15	---	---	---	93	84	87	30	80	74	77	82	79	81
							31	82	77	79	82	79	81
							MONTH	---	---	---	98	72	84
FEBRUARY				MARCH			APRIL			MAY			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
1	82	78	80	138	90	104	61	55	59	71	63	66	
2	79	77	78	128	112	117	57	56	56	67	63	64	
3	78	74	77	112	93	98	59	57	58	63	57	59	
4	145	72	114	105	88	99	61	59	59	59	55	57	
5	99	92	95	104	96	100	63	61	62	64	58	61	
6	93	86	90	104	95	99	63	62	63	72	59	65	
7	86	83	85	100	94	96	62	61	61	70	60	65	
8	86	83	85	101	91	97	---	---	---	68	60	64	
9	84	82	83	97	90	94	---	---	---	60	57	58	
10	84	81	82	101	91	96	---	---	---	67	59	62	
11	82	80	81	100	90	95	70	68	69	68	61	64	
12	82	74	81	94	87	91	73	67	69	72	62	65	
13	128	73	84	97	91	93	73	70	72	75	62	68	
14	107	92	96	96	89	92	77	70	72	69	65	67	
15	95	87	91	95	86	89	72	69	70	66	53	56	
16	89	84	86	89	84	87	68	57	64	61	55	58	
17	89	82	85	---	---	---	57	54	55	62	58	60	
18	88	83	85	---	---	---	58	55	57	65	58	61	
19	92	80	86	---	---	---	60	57	58	62	58	60	
20	85	83	84	86	81	84	58	54	57	62	59	60	
21	84	81	83	87	82	83	60	57	58	67	60	63	
22	81	80	80	83	48	68	62	58	60	68	63	65	
23	87	81	83	61	53	58	59	54	56	77	65	70	
24	82	80	81	59	56	58	61	57	59	79	67	72	
25	83	80	81	58	57	57	63	59	61	163	52	77	
26	81	80	80	59	57	58	64	59	61	80	52	72	
27	84	80	81	60	59	59	62	60	61	80	71	74	
28	90	80	84	61	59	60	67	60	63	83	71	77	
29	96	88	90	62	56	60	68	61	64	83	76	79	
30	---	---	---	59	56	57	72	62	66	78	47	71	
31	---	---	---	61	59	60	---	---	---	71	57	64	
MONTH							145	74	85	138	48	82	

CONNECTICUT RIVER BASIN

01174000 HOP BROOK NEAR NEW SALEM, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C), DECEMBER 1971 TO SEPTEMBER 1972.--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	54	43	46	56	53	54	74	68	72	104	59	87
2	56	49	52	61	54	58	75	73	75	101	85	92
3	61	54	57	63	59	61	78	74	76	108	88	93
4	61	58	60	62	57	59	78	75	77	99	83	88
5	62	58	60	61	58	59	82	78	80	97	87	93
6	66	58	61	63	57	59	83	79	80	99	85	92
7	62	59	61	65	59	62	83	80	81	108	89	96
8	64	58	61	64	61	63	83	75	79	91	82	85
9	60	56	58	67	61	63	82	79	81	89	83	87
10	54	48	51	70	63	66	80	76	78	95	81	88
11	61	53	58	71	65	68	84	80	83	86	74	82
12	107	44	63	73	66	69	88	83	86	105	85	90
13	61	54	57	73	68	70	90	87	89	97	91	93
14	61	57	59	96	62	75	99	89	94	122	96	100
15	62	58	60	76	66	69	98	89	92	103	91	96
16	61	59	60	71	68	69	195	91	115	104	95	97
17	64	58	61	71	67	69	119	53	89	96	94	94
18	64	60	62	72	68	70	86	75	82	132	97	108
19	63	61	62	75	67	72	89	76	82	122	104	109
20	64	60	62	75	67	73	88	82	84	109	107	108
21	65	61	63	77	73	74	133	84	100	110	106	107
22	65	60	62	80	74	77	103	91	94	110	107	109
23	98	60	68	81	73	78	106	89	93	126	110	112
24	59	54	57	82	74	77	113	102	107	---	---	---
25	58	54	55	170	75	86	115	102	108	---	---	---
26	57	55	56	151	57	87	102	96	99	---	---	---
27	61	56	58	100	72	82	109	96	100	---	---	---
28	63	58	61	79	72	75	91	59	79	124	123	124
29	66	60	62	77	74	76	133	88	92	139	122	123
30	64	50	57	77	74	76	106	82	91	126	115	123
31	---	---	---	77	74	76	97	93	95	---	---	---
MONTH	107	43	59	170	53	70	195	53	88	139	59	99
PERIOD	195	43	77									

TEMPERATURE (°C) OF WATER, DECEMBER 1971 TO SEPTEMBER 1972

DAY	DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	0.0	0.0	0.0
2	---	---	---	0.0	0.0	0.0
3	---	---	---	1.0	0.0	0.5
4	---	---	---	2.0	0.0	1.0
5	---	---	---	2.0	0.0	1.0
6	---	---	---	0.0	0.0	0.0
7	---	---	---	0.0	0.0	0.0
8	---	---	---	0.0	0.0	0.0
9	---	---	---	0.0	0.0	0.0
10	---	---	---	0.0	0.0	0.0
11	---	---	---	2.0	0.5	1.5
12	---	---	---	3.0	1.5	2.0
13	---	---	---	3.5	1.0	2.5
14	---	---	---	3.5	0.0	2.0
15	---	---	---	1.0	0.0	0.0
16	---	---	---	0.0	0.0	0.0
17	---	---	---	0.0	0.0	0.0
18	3.0	0.0	2.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0
20	1.0	0.0	0.5	0.0	0.0	0.0
21	2.5	1.0	2.0	1.0	0.0	0.5
22	2.0	0.0	0.5	1.5	0.0	1.0
23	0.0	0.0	0.0	2.0	1.5	1.5
24	2.0	0.0	0.5	2.5	1.5	2.0
25	1.5	0.0	0.5	2.0	0.0	1.0
26	2.5	0.0	1.0	0.0	0.0	0.0
27	2.5	2.0	2.0	0.0	0.0	0.0
28	4.0	2.0	3.0	0.0	0.0	0.0
29	2.0	1.0	1.5	0.0	0.0	0.0
30	1.5	0.0	0.5	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	---	---	---	3.5	0.0	0.5

335

TEMPERATURE (°C) OF WATER, DECEMBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	0.5	0.0	0.0	5.5	0.5	2.5	13.5	7.5	10.5
2	0.0	0.0	0.0	0.0	0.0	0.0	3.5	1.0	2.0	10.5	7.5	9.0
3	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.5	2.0	7.5	6.5	7.0
4	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	8.0	7.0	7.5
5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	1.5	9.0	6.0	7.5
6	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.5	12.0	5.0	8.5
7	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	11.5	7.5	9.5
8	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	9.5	7.0	8.0
9	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	7.0	6.0	6.5
10	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	8.5	5.5	7.0
11	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	2.5	9.0	4.5	6.5
12	0.0	0.0	0.0	0.5	0.0	0.0	8.0	0.5	3.0	12.0	4.5	8.5
13	0.0	0.0	0.0	1.0	0.5	0.5	2.0	0.5	1.0	15.0	6.5	10.5
14	0.0	0.0	0.0	0.5	0.0	0.5	5.0	1.5	3.0	12.5	8.5	11.0
15	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.5	2.5	11.0	10.0	10.5
16	0.5	0.0	0.0	1.0	0.0	0.5	7.5	2.5	4.5	15.0	10.0	12.0
17	0.0	0.0	0.0	---	---	---	8.0	3.0	5.0	14.0	11.0	12.5
18	0.0	0.0	0.0	---	---	---	9.0	3.0	5.5	15.5	10.0	13.0
19	0.0	0.0	0.0	---	---	---	10.0	4.5	7.0	13.0	11.0	12.0
20	0.0	0.0	0.0	1.5	0.5	1.0	7.0	3.0	5.0	11.0	10.0	10.5
21	0.0	0.0	0.0	3.0	0.0	1.5	8.0	2.5	5.0	16.5	10.5	13.0
22	0.0	0.0	0.0	1.0	0.0	0.5	6.5	3.0	4.5	17.0	11.5	14.0
23	0.0	0.0	0.0	1.5	0.0	1.0	7.0	4.0	5.5	17.5	10.0	14.0
24	0.0	0.0	0.0	2.5	0.5	1.0	8.0	5.0	6.5	16.5	11.0	14.0
25	0.0	0.0	0.0	2.0	0.0	1.0	9.5	3.5	6.0	16.0	10.5	13.0
26	0.0	0.0	0.0	2.5	0.0	0.5	8.5	3.0	5.5	14.5	8.0	11.5
27	0.0	0.0	0.0	1.5	0.0	0.0	7.5	3.0	5.0	15.5	8.5	12.0
28	0.0	0.0	0.0	3.0	0.0	1.0	10.0	2.0	6.0	16.5	10.0	13.5
29	0.0	0.0	0.0	5.0	0.0	2.0	11.5	4.5	8.0	17.0	11.5	14.0
30	---	---	---	2.0	1.0	1.5	13.0	4.5	8.5	17.0	12.5	14.5
31	---	---	---	2.5	1.5	2.0	---	---	---	15.5	13.5	14.5
MONTH	0.5	0.0	0.0	5.0	0.0	0.5	13.0	0.0	4.5	17.5	4.5	11.0
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	13.0	13.5	15.0	13.0	14.0	18.5	15.5	16.5	17.0	13.5	15.5
2	13.5	11.5	12.5	18.0	13.0	15.5	18.5	16.0	17.5	18.0	16.5	17.5
3	16.0	11.5	13.5	16.5	15.5	16.0	18.5	17.0	17.5	17.5	14.0	16.5
4	15.5	13.0	14.5	16.5	14.0	15.0	19.0	17.5	18.0	16.0	12.0	15.5
5	16.0	13.5	14.5	14.5	13.0	13.5	18.5	12.5	15.0	16.0	10.5	14.0
6	15.5	12.0	13.5	15.5	11.5	13.5	16.0	12.5	14.5	15.5	9.5	13.5
7	15.0	13.0	14.0	16.0	12.5	14.0	16.5	15.0	15.5	14.5	10.5	13.0
8	13.0	11.0	12.0	16.5	13.0	14.5	18.0	16.0	17.0	16.0	11.5	13.5
9	15.5	12.0	13.5	17.0	13.0	15.0	18.0	15.0	16.5	15.0	10.0	12.5
10	14.0	11.0	13.0	17.5	14.5	16.0	17.5	14.0	16.0	15.0	13.0	14.5
11	12.5	9.5	11.0	19.0	15.0	17.0	15.5	12.0	14.0	16.5	11.5	15.5
12	12.5	8.5	10.5	20.0	15.5	17.5	16.0	13.0	14.5	15.5	11.5	14.0
13	14.0	10.5	12.0	19.0	17.0	17.5	18.5	15.0	16.0	17.5	11.5	16.5
14	16.5	12.0	14.0	19.5	16.5	18.0	18.0	15.0	16.0	18.5	16.0	17.0
15	17.0	14.0	15.0	21.5	17.0	19.0	16.0	13.5	15.5	17.0	16.0	17.0
16	15.5	14.5	15.0	20.5	18.5	19.5	19.0	11.0	14.0	14.0	10.0	11.5
17	16.5	14.0	15.0	21.0	18.5	20.0	15.5	14.0	15.0	15.0	12.0	13.5
18	16.5	14.0	15.5	21.0	17.5	19.5	17.5	15.5	16.0	15.5	12.0	12.5
19	15.0	13.5	14.0	22.0	19.0	20.0	18.5	15.5	17.0	12.5	10.0	11.0
20	16.0	13.0	14.5	20.5	18.5	19.5	17.5	14.5	16.0	14.5	10.5	12.5
21	16.5	14.0	15.5	20.5	18.5	19.5	18.0	13.5	16.0	16.5	15.0	15.5
22	16.0	14.5	15.0	21.0	18.0	19.5	18.5	10.5	16.0	17.5	14.5	16.5
23	14.5	13.0	14.0	21.0	19.0	20.0	18.5	8.5	16.5	14.5	12.0	13.0
24	14.0	12.5	13.5	21.5	19.0	20.5	19.5	17.5	18.5	---	---	---
25	13.0	12.5	13.0	20.5	17.5	19.0	20.5	18.5	19.5	---	---	---
26	13.0	12.0	12.5	21.5	15.5	18.0	21.0	18.5	19.5	---	---	---
27	15.5	12.0	13.5	19.5	15.5	17.5	19.5	18.0	19.0	---	---	---
28	16.5	13.0	14.5	18.5	15.0	16.5	20.5	11.5	19.0	---	---	---
29	17.5	13.5	15.5	18.0	14.5	16.5	19.5	10.0	18.0	12.5	10.5	11.5
30	16.0	13.5	14.5	18.0	14.0	16.0	17.0	11.0	15.0	15.0	12.0	13.5
31	---	---	---	17.5	14.0	15.5	18.0	14.0	16.0	---	---	---
MONTH	17.5	8.5	13.5	22.0	11.5	17.0	21.0	8.5	16.5	18.5	9.5	14.5
PERIOD	22.0	0.0	8.5									

01177200 CONNECTICUT RIVER AT WEST SPRINGFIELD, MASS.

LOCATION.--Lat 42°05'46", long 72°35'43", Hampden County, four-parameter monitor on right bank at powerplant intake, 800 ft downstream from Memorial Bridge, 1.1 miles upstream from Westfield River, 1.5 miles southeast of West Springfield, and 4.4 miles downstream from Chicopee River.

PERIOD OF RECORD.--Chemical analyses: August and September 1972.
Water temperatures: August and September 1972.

EXTREMES.--August and September 1972:

Specific conductance: Maximum, 148 micromhos Sept. 9, 14; minimum, 100 micromhos Aug. 6.

pH: Maximum, 7.9 Sept. 30; minimum, 6.3 Sept. 16, 17.

Dissolved oxygen: Maximum, 7.7 mg/l Sept. 24; minimum, 3.4 mg/l Aug. 9.

Water temperatures: Maximum, 27.5°C Aug. 27; minimum, 18.0°C Sept. 24.

SPECIFIC CONDUCTANCE, PH, DISSOLVED OXYGEN, AND TEMPERATURE OF WATER, AUGUST AND SEPTEMBER 1972

DAY	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)			PH (UNITS)			DISSOLVED OXYGEN (MG/L)			TEMPERATURE OF WATER (°C)		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	120	112	115	---	---	---	6.2	6.0	6.1	24.0	23.5	24.0
5	122	108	112	---	---	---	6.2	5.4	5.9	24.0	22.5	23.5
6	110	100	105	---	---	---	6.3	5.5	5.9	23.5	22.5	23.0
7	112	102	108	---	---	---	6.0	4.9	5.2	23.0	22.5	22.5
8	114	110	112	---	---	---	4.9	4.4	4.6	23.5	22.5	23.0
9	119	114	116	---	---	---	4.3	3.4	3.8	23.0	22.5	23.0
10	120	113	117	---	---	---	---	---	---	22.5	22.0	22.5
11	120	110	115	---	---	---	---	---	---	22.5	21.5	22.0
12	115	112	113	---	---	---	---	---	---	22.5	21.5	22.0
13	122	112	116	---	---	---	---	---	---	23.0	21.5	22.5
14	123	112	115	---	---	---	---	---	---	23.0	22.0	23.0
15	132	117	125	7.2	6.7	7.0	6.0	4.9	5.4	22.5	22.0	22.5
16	130	122	126	7.3	7.1	7.2	7.3	5.7	6.5	22.5	22.0	22.5
17	126	120	124	7.3	7.1	7.2	7.1	6.4	6.7	22.5	22.0	22.0
18	124	109	121	7.4	7.1	7.2	6.6	5.5	6.0	22.5	21.5	22.0
19	123	115	119	7.5	7.1	7.3	6.1	5.1	5.5	23.0	22.0	22.5
20	132	115	119	7.8	6.9	7.2	5.0	4.0	4.6	24.0	22.0	23.0
21	123	115	119	7.5	6.8	7.1	---	---	---	23.5	22.0	23.0
22	123	116	120	7.3	7.1	7.2	---	---	---	24.0	23.0	23.5
23	120	116	118	7.4	6.9	7.1	6.8	6.3	6.5	24.5	24.0	24.5
24	123	117	120	7.3	7.1	7.2	6.6	5.8	6.1	25.0	24.5	25.0
25	127	122	124	7.1	6.9	7.0	5.9	5.2	5.5	26.0	25.0	25.5
26	128	123	125	7.0	6.7	7.0	5.9	4.8	5.6	26.5	25.5	26.0
27	125	115	120	7.0	6.7	6.8	5.5	4.3	5.0	27.5	25.5	26.5
28	123	116	120	6.9	6.6	6.7	6.7	4.0	5.1	26.0	25.5	25.5
29	126	120	123	7.4	6.8	7.3	7.6	6.0	6.7	25.5	24.5	25.0
30	122	116	119	7.3	7.1	7.2	6.7	5.6	6.2	25.0	23.5	24.5
31	124	121	122	7.3	7.1	7.2	7.3	6.3	6.8	24.5	23.5	24.0
MONTH	132	100	118	---	---	---	---	---	---	27.5	21.5	23.5

01177200 CONNECTICUT RIVER AT WEST SPRINGFIELD, MASS.--Continued

SPECIFIC CONDUCTANCE, PH, DISSOLVED OXYGEN, AND TEMPERATURE OF WATER, AUGUST AND SEPTEMBER 1972.--Continued

SEPTEMBER

DAY	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)			PH (UNITS)			DISSOLVED OXYGEN (MG/L)			TEMPERATURE OF WATER (°C)		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	129	123	126	7.2	7.1	7.2	7.0	5.7	6.5	24.5	24.0	24.0
2	131	124	127	7.4	7.1	7.3	6.7	5.5	6.1	24.0	23.5	24.0
3	130	123	125	7.5	7.3	7.4	6.2	5.8	6.0	23.5	22.5	23.0
4	127	121	123	7.5	7.3	7.4	6.1	5.3	5.9	22.5	21.5	22.5
5	127	121	124	7.3	7.0	7.2	5.5	4.0	4.9	22.5	21.5	22.0
6	132	125	128	7.5	7.2	7.3	6.0	5.2	5.6	23.0	21.5	22.0
7	135	124	129	7.5	7.3	7.4	6.9	5.2	5.6	23.0	21.5	22.5
8	143	135	140	7.3	7.1	7.2	6.7	5.8	6.2	23.0	22.0	22.5
9	148	142	144	7.1	6.8	7.0	6.5	5.5	6.1	23.0	21.5	22.0
10	145	136	140	6.9	6.7	6.8	6.5	5.4	5.9	22.0	21.0	21.5
11	142	137	138	6.8	6.5	6.7	6.7	5.3	6.0	22.0	20.0	21.0
12	143	136	141	6.8	6.6	6.7	6.4	4.6	5.6	22.5	20.5	21.5
13	143	138	141	7.0	6.6	6.8	5.8	4.7	5.1	22.0	21.0	21.5
14	148	138	144	7.1	6.7	6.9	5.3	4.3	4.8	21.0	20.5	21.0
15	140	136	138	6.7	6.5	6.6	6.3	5.2	5.7	21.0	20.0	20.5
16	138	131	135	6.6	6.3	6.4	6.3	5.4	5.9	21.0	20.5	20.5
17	137	126	132	6.8	6.3	6.6	---	---	---	22.5	20.5	21.0
18	134	125	127	7.2	6.8	7.0	---	---	---	23.0	21.5	22.0
19	136	127	132	7.4	7.2	7.3	---	---	---	23.0	21.0	22.5
20	135	126	130	7.3	7.1	7.2	---	---	---	21.0	20.0	20.5
21	130	125	128	7.3	7.1	7.1	6.3	5.7	6.0	20.0	19.5	20.0
22	136	125	132	---	---	---	6.5	4.9	5.7	20.5	19.0	19.5
23	135	131	133	---	---	---	7.2	5.2	6.1	19.5	18.5	19.0
24	136	131	133	---	---	---	7.7	5.5	6.6	20.5	18.0	19.0
25	143	129	135	---	---	---	6.9	5.6	6.3	21.5	18.5	19.5
26	139	128	134	---	---	---	---	---	---	---	---	---
27	143	128	134	---	---	---	7.4	6.0	6.7	22.0	19.5	20.5
28	138	130	135	---	---	---	7.1	5.8	6.4	23.0	20.5	21.5
29	137	132	134	7.2	6.9	7.0	7.3	5.7	6.6	20.5	19.5	20.0
30	146	136	141	7.9	7.1	7.5	6.9	5.6	6.3	19.5	19.0	19.0
31	---	---	---	---	---	---	5.4	3.6	4.6	21.0	18.5	19.0
MONTH	148	121	133	---	---	---	7.7	3.6	5.9	24.5	18.0	21.0
PERIOD	148	100	126	7.9	6.3	7.1	7.7	3.4	5.8	27.5	18.0	22.5

01180800 WALKER BROOK NEAR BECKET CENTER, MASS.

LOCATION.--Lat 42°15'49", long 73°02'48", Berkshire County, two-parameter monitor at gaging station on right bank 20 ft upstream from culvert on U.S. Highway 20, 0.2 mile east of Bonny Rigg Corners, 1.7 miles southeast of Becket Center, and 3.5 miles west of Chester.

DRAINAGE AREA.--3.01 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.

Water temperatures: December 1971 to September 1972.

EXTREMES.--December 1971 to September 1972:

Specific conductance: Maximum, 510 micromhos Feb. 13; minimum, 58 micromhos June 24.

Water temperatures: Maximum, 23.5°C Aug. 26; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	168	---	---	160	---	---	126	137	129	133
2	---	---	173	---	---	123	---	---	132	231	130	149
3	---	---	170	---	---	121	---	---	139	139	119	124
4	---	---	170	---	---	129	---	---	139	136	122	126
5	---	---	170	---	---	138	---	---	144	170	129	139
6	---	---	175	---	---	143	---	---	135	150	135	143
7	---	---	168	---	---	128	---	---	88	145	138	141
8	---	---	168	---	---	133	---	---	98	149	140	144
9	---	---	175	---	---	137	127	114	118	212	146	161
10	---	---	93	---	---	140	121	117	119	173	132	142
11	---	---	94	---	---	143	122	102	110	142	137	140
12	---	---	113	---	---	147	118	105	112	164	138	143
13	---	---	133	---	---	148	122	119	120	159	140	147
14	---	---	142	---	---	149	123	120	121	153	125	131
15	---	---	145	---	---	145	173	132	143	146	122	134
16	---	---	148	---	---	124	136	98	111	149	137	142
17	---	---	152	---	---	128	104	95	99	147	137	142
18	---	---	154	---	---	136	121	101	107	165	135	140
19	---	---	155	---	---	140	123	108	116	144	135	139
20	---	---	157	---	---	138	122	111	114	208	142	149
21	---	---	158	---	---	142	149	108	116	185	147	154
22	---	---	160	---	---	142	135	115	123	152	150	151
23	---	---	162	---	---	144	134	117	125	160	151	153
24	---	---	162	---	---	143	244	102	132	190	152	162
25	---	---	135	---	---	145	121	96	103	227	147	168
26	---	---	142	---	---	133	132	105	116	157	139	148
27	---	---	147	---	---	139	124	113	116	158	149	154
28	---	---	148	---	---	143	140	110	120	160	153	155
29	---	---	153	---	---	142	116	110	113	157	153	155
30	---	---	157	---	---	113	133	118	124	163	156	158
31	---	---	160	---	---	---	160	125	131	161	158	160
MONTH	---	---	152	---	---	138	---	---	120	231	119	146

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

01180800 WALKER BROOK NEAR BECKET CENTER, MASS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	163	159	161	240	165	194	166	140	148	89	84	86
2	163	161	162	182	170	175	149	135	139	98	89	92
3	165	161	162	193	163	176	147	138	142	104	85	93
4	240	159	185	222	157	167	218	142	150	87	82	84
5	157	149	151	176	155	160	165	130	150	93	86	89
6	155	151	153	165	153	161	178	138	153	99	93	96
7	163	154	156	178	156	164	170	154	158	107	99	103
8	159	156	158	250	166	180	169	137	158	125	107	114
9	161	159	160	174	156	166	178	137	164	107	91	94
10	172	161	163	176	154	166	185	154	167	98	92	94
11	181	163	167	172	157	166	182	163	171	112	97	102
12	172	165	166	220	164	175	186	163	169	110	106	107
13	510	168	217	180	162	170	185	153	162	113	110	112
14	184	155	169	180	169	173	151	124	140	143	112	118
15	220	152	174	175	165	171	134	124	129	147	99	110
16	186	156	166	234	167	187	138	108	129	115	75	85
17	167	150	158	246	141	186	112	80	96	109	84	92
18	160	156	157	171	135	155	92	79	85	102	97	99
19	173	157	162	158	138	145	90	74	81	106	100	103
20	166	157	161	155	131	146	90	74	90	119	103	112
21	159	156	158	158	146	151	98	90	94	103	88	96
22	159	159	159	180	126	159	105	92	98	106	97	101
23	161	159	160	130	121	126	99	75	83	115	106	110
24	212	161	169	128	122	124	77	71	74	121	115	119
25	196	160	172	132	122	125	78	70	75	123	120	121
26	187	164	171	140	116	130	81	76	79	132	124	128
27	261	162	182	144	120	132	85	81	83	138	126	131
28	224	165	180	143	112	136	90	85	88	140	131	136
29	240	165	182	167	133	146	89	84	87	161	137	146
30	---	---	---	222	139	147	87	84	85	152	147	149
31	---	---	---	146	140	143	---	---	---	198	84	122
MONTH	510	149	167	250	112	158	218	70	121	198	75	108
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	88	71	76	---	---	85	172	163	169	195	166	187
2	92	82	86	---	---	98	178	149	163	203	173	192
3	111	92	99	---	---	87	169	155	163	200	167	183
4	116	105	109	---	---	86	176	165	172	178	168	173
5	161	122	129	---	---	97	187	175	184	190	175	184
6	136	120	123	---	---	103	194	181	186	201	183	193
7	124	106	110	---	---	110	183	166	176	201	180	191
8	117	106	111	---	---	116	193	175	188	198	179	189
9	129	95	108	---	---	121	199	171	183	199	179	191
10	96	82	86	---	---	128	199	181	188	197	182	191
11	99	88	94	---	---	132	208	193	200	221	159	198
12	112	100	107	130	124	128	204	185	194	225	153	201
13	119	112	116	150	116	130	202	181	191	242	162	212
14	123	118	120	117	111	113	220	162	182	221	163	185
15	127	122	125	132	118	124	195	179	189	197	159	180
16	130	125	129	162	132	137	211	194	198	171	161	165
17	132	126	129	145	129	134	203	182	192	184	172	178
18	164	131	136	146	131	139	207	196	202	198	185	191
19	145	135	140	140	129	136	206	169	192	237	166	189
20	141	130	135	151	140	145	189	169	177	198	157	181
21	144	138	140	151	137	146	189	178	183	250	157	202
22	156	83	118	153	142	146	201	183	191	244	201	213
23	88	61	74	159	149	153	206	183	197	248	215	235
24	71	58	63	164	153	160	243	190	205	254	237	244
25	77	73	75	159	109	124	198	167	181	256	236	246
26	---	---	88	130	111	120	179	172	175	255	236	247
27	---	---	98	147	131	139	251	115	181	259	242	253
28	---	---	108	160	148	156	144	123	129	276	253	263
29	---	---	115	170	159	167	153	124	136	284	257	271
30	---	---	70	175	167	171	177	152	163	259	128	203
31	---	---	---	172	162	166	194	174	183	---	---	---
MONTH	164	58	107	---	---	129	251	115	181	284	128	204
YEAR	510	58	144									

NOTE.--The figures on those days showing only mean specific conductance are based on the relationship between discharge and specific conductance.

01180800 WALKER BROOK NEAR BECKET CENTER, MASS.--Continued

CHLORIDE (MG/L AS CL), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

NOTE.--Chloride concentrations based on relationship with specific conductance.

CHLORIDE LOADS AS NaCl, POUNDS PER DAY, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

CONNECTICUT RIVER BASIN

341

01180800 WALKER BROOK NEAR BECKET CENTER, MASS.--Continued

TEMPERATURE (°C) OF WATER, DECEMBER 1971 TO SEPTEMBER 1972

DECEMBER				JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	0.0	0.0	0.0
2	---	---	---	0.0	0.0	0.0
3	---	---	---	0.0	0.0	0.0
4	---	---	---	0.5	0.0	0.0
5	---	---	---	0.5	0.0	0.5
6	---	---	---	0.0	0.0	0.0
7	---	---	---	0.5	0.0	0.0
8	---	---	---	0.5	0.0	0.0
9	2.0	2.0	2.0	0.5	0.0	0.0
10	2.5	2.0	2.5	0.5	0.5	0.5
11	2.5	1.5	2.0	1.0	0.5	0.5
12	1.5	0.0	1.0	2.0	1.0	1.0
13	2.0	0.5	1.0	2.5	1.0	1.5
14	1.0	0.0	0.5	1.5	0.0	1.0
15	1.0	0.0	0.5	0.5	0.0	0.0
16	3.0	1.5	2.5	0.5	0.0	0.0
17	2.0	1.0	1.5	0.5	0.0	0.0
18	0.5	0.0	0.0	0.5	0.0	0.5
19	0.0	0.0	0.0	0.5	0.0	0.5
20	0.0	0.0	0.0	0.5	0.0	0.5
21	0.5	0.0	0.0	1.0	0.0	0.5
22	0.5	0.0	0.0	0.5	0.0	0.5
23	0.0	0.0	0.0	1.5	0.5	1.0
24	0.0	0.0	0.0	1.5	0.5	1.0
25	0.0	0.0	0.0	1.0	0.0	0.5
26	0.5	0.0	0.0	0.5	0.0	0.0
27	1.0	0.5	1.0	0.5	0.0	0.0
28	2.0	0.5	1.5	0.5	0.0	0.0
29	1.5	0.5	1.0	0.5	0.0	0.0
30	0.5	0.0	0.0	0.5	0.0	0.5
31	0.0	0.0	0.0	0.5	0.0	0.0
MEAN	---	---	---	2.5	0.0	0.5

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.5	1.0	0.0	0.5	4.0	0.5	1.5	12.0	7.0	9.0
2	0.5	0.0	0.5	0.0	0.0	0.0	1.5	0.5	1.0	10.0	8.0	9.0
3	0.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.0	8.5	8.0	8.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	9.0	7.5	8.0
5	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.5	9.5	5.5	7.5
6	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	12.0	8.0	9.5
7	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	12.0	8.0	10.0
8	0.0	0.0	0.0	0.5	0.0	0.0	2.5	0.0	0.5	8.0	7.0	7.5
9	0.0	0.0	0.0	0.5	0.0	0.0	3.0	0.0	1.0	7.0	6.0	6.5
10	0.0	0.0	0.0	0.5	0.0	0.0	3.5	0.0	1.5	9.0	6.0	7.0
11	0.0	0.0	0.0	0.5	0.0	0.0	2.5	0.5	1.0	10.0	5.0	7.5
12	0.0	0.0	0.0	0.5	0.5	0.5	4.0	0.0	1.5	12.5	6.0	9.0
13	0.0	0.0	0.0	1.5	0.5	1.0	1.0	0.0	0.5	14.5	7.0	11.0
14	0.0	0.0	0.0	1.0	0.5	0.5	2.5	0.5	1.0	12.0	9.0	11.0
15	0.5	0.0	0.0	0.5	0.5	0.5	1.0	0.0	0.5	12.5	10.5	11.5
16	0.5	0.0	0.0	1.0	0.5	0.5	3.5	1.0	1.5	14.0	11.0	12.0
17	0.0	0.0	0.0	0.5	0.0	0.5	3.0	2.0	1.0	15.0	12.0	13.0
18	0.5	0.0	0.0	0.5	0.0	0.0	4.5	0.0	2.0	14.5	11.5	13.0
19	0.0	0.0	0.0	1.0	0.0	0.5	5.5	0.5	2.0	15.0	11.5	13.0
20	0.0	0.0	0.0	1.0	0.0	0.5	2.0	0.5	1.0	12.0	11.5	11.5
21	0.0	0.0	0.0	2.0	0.5	1.0	5.5	0.0	2.5	16.0	11.5	13.5
22	0.0	0.0	0.0	1.0	0.0	0.5	3.0	0.5	2.0	17.0	13.0	14.5
23	0.0	0.0	0.0	0.5	0.0	0.0	4.5	1.5	2.5	17.5	11.5	14.5
24	0.0	0.0	0.0	1.5	0.0	0.5	5.0	2.5	3.5	17.0	12.5	15.0
25	0.5	0.0	0.0	1.0	0.0	0.5	7.0	2.0	4.0	16.5	12.0	14.0
26	0.5	0.0	0.0	1.0	0.0	0.0	7.0	2.0	4.0	15.0	9.0	12.0
27	0.5	0.0	0.0	1.0	0.0	0.0	5.5	2.5	4.0	16.5	9.5	13.0
28	0.5	0.5	0.5	1.5	0.0	0.5	7.5	2.0	4.5	18.0	11.5	14.5
29	0.5	0.0	0.5	3.0	0.0	1.5	9.5	3.5	6.5	18.5	12.5	15.0
30	---	---	---	1.0	1.0	1.0	11.0	4.0	7.5	17.5	13.0	16.0
31	---	---	---	2.0	1.0	1.5	---	---	---	15.0	14.5	15.0
MEAN	0.5	0.0	0.0	3.0	0.0	0.5	11.0	0.0	2.0	18.5	5.0	11.5

01180800 WALKER BROOK NEAR BECKET CENTER, MASS.--Continued
TEMPERATURE (°C) OF WATER, DECEMBER 1971 TO SEPTEMBER 1972.--Continued

MONTHLY SUMMARY												
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.5	14.0	15.0	---	---	---	---	---	---	---	---	---
2	14.5	13.0	14.0	---	---	---	19.5	15.0	17.0	---	---	---
3	16.5	12.0	14.5	---	---	---	18.5	16.5	17.0	19.0	14.0	16.5
4	17.0	14.5	16.0	---	---	---	19.0	16.5	17.5	17.0	14.5	15.5
5	16.0	14.0	15.0	---	---	---	19.5	11.5	15.0	18.0	15.5	16.5
				---	---	---	17.5	12.0	14.5	17.0	13.5	15.5
6	16.0	13.0	14.5	---	---	---	---	---	---	18.0	11.5	14.5
7	14.5	13.0	14.0	---	---	---	18.0	14.5	15.5	---	---	---
8	14.5	12.0	13.7	---	---	---	17.5	15.5	16.0	17.5	10.5	13.5
9	16.0	13.5	14.5	---	---	---	18.0	13.5	15.5	18.5	10.5	14.0
10	14.5	12.0	13.9	---	---	---	18.5	13.0	15.5	19.0	12.0	15.0
				---	---	---	17.5	11.5	14.0	19.0	13.5	16.0
										17.0	10.5	13.5
11	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
12	12.5	9.5	11.5	---	---	---	18.0	12.5	14.5	---	---	---
13	14.0	11.5	13.0	20.0	18.0	19.0	18.0	14.5	16.0	17.0	10.0	13.0
14	16.0	13.5	15.0	18.0	17.0	17.5	20.0	14.0	16.5	19.0	12.5	15.5
15	18.0	15.0	16.5	20.0	17.0	18.5	18.0	14.0	15.5	19.0	13.0	14.0
				21.5	18.0	19.5	17.0	11.0	13.5	17.5	14.5	15.5
										16.5	11.5	14.0
16	16.5	15.0	16.0	21.0	18.5	19.5	16.0	14.0	15.0	---	---	---
17	16.5	15.0	15.5	21.0	18.0	19.5	16.0	14.0	15.0	17.0	11.0	13.5
18	16.5	14.0	15.5	21.0	17.0	19.0	15.5	13.5	14.5	19.5	12.5	15.5
19	15.0	14.5	15.0	22.5	18.5	20.0	19.0	14.0	16.0	20.5	15.0	17.5
20	17.0	14.5	15.5	20.5	18.5	19.5	20.5	14.5	17.0	17.0	14.5	16.5
							20.5	12.5	16.0	16.0	12.0	14.0
21	16.5	15.5	16.0	21.0	18.5	19.5	---	---	---	---	---	---
22	16.0	14.5	15.5	21.5	18.0	20.0	20.0	12.5	16.0	12.0	10.0	11.0
23	15.0	14.0	14.5	22.0	19.0	20.0	21.5	13.5	17.0	16.0	11.5	13.5
24	14.0	13.5	13.5	22.0	16.5	19.0	21.5	14.5	17.5	14.5	8.5	11.5
25	---	---	---	19.5	16.5	17.5	21.5	17.0	19.0	12.5	9.5	11.5
							23.0	17.5	19.5	17.0	12.0	14.0
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	19.0	16.0	17.5	23.5	17.5	19.5	---	---	---
28	---	---	---	18.5	14.5	16.5	---	---	---	18.0	13.0	15.5
29	---	---	---	19.0	13.5	16.0	20.0	17.0	18.5	18.5	15.5	16.5
30	---	---	---	19.0	13.5	15.5	15.5	16.0	18.5	16.0	11.5	14.0
31	---	---	---	17.5	13.5	15.5	20.5	17.5	18.5	12.0	10.5	11.5
				18.0	15.0	15.5	19.5	15.5	17.0	15.0	11.5	13.0
MEAN	16.0	14.0	14.5	---	---	---	23.5	11.0	16.5	---	---	---
PERIOD	23.5	0.0	7.5							20.5	8.5	14.5

LOCATION.--Lat 42°05'59", long 72°38'28", Hampden County, four-parameter monitor on left bank at canal, 0.3 mile downstream from dam, 0.6 mile downstream from Block Brook, 1.0 mile west of West Springfield, and 3.5 miles upstream from mouth.

EXTREMES.--June to September 1972:

Specific conductance: Maximum, 200 micromhos Sept. 13; minimum recorded, 64 micromhos June 23.
pH: Maximum, 7.6 July 28; minimum, 6.3 Aug. 10.
Dissolved oxygen: Maximum, 9.7 mg/l Aug. 1; minimum, 4.2 mg/l Sept. 9, 29.
Water temperatures: Maximum, 26.5°C July 24; minimum recorded, 14.5°C June 23.

REMARKS.--Dissolved oxygen probe not operating prior to July 10; pH probe not operating Aug. 23 to September 30.

[illegible]

CONNECTICUT RIVER BASIN

01103600 WESTFIELD RIVER AT WEST SPRINGFIELD, MASS.--Continued

PH (UNITS), JUNE TO SEPTEMBER 1972

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	7.4	6.9	7.1	---	---	---
2	---	---	---	---	---	---	7.2	6.8	7.0	---	---	---
3	---	---	---	---	---	---	7.2	6.8	7.0	---	---	---
4	---	---	---	---	---	---	7.1	6.6	6.9	---	---	---
5	---	---	---	---	---	---	7.2	7.0	7.1	---	---	---
6	---	---	---	---	---	---	7.2	6.9	7.0	---	---	---
7	---	---	---	---	---	---	7.0	6.8	6.9	---	---	---
8	---	---	---	---	---	---	7.1	6.7	6.9	---	---	---
9	---	---	---	---	---	---	6.9	6.5	6.7	---	---	---
10	---	---	---	7.1	6.9	7.0	7.0	6.3	6.7	---	---	---
11	---	---	---	7.5	6.7	6.9	7.0	6.6	6.7	---	---	---
12	---	---	---	7.1	6.7	6.9	6.8	6.6	6.7	---	---	---
13	---	---	---	7.0	6.8	6.9	7.0	6.6	6.8	---	---	---
14	---	---	---	7.2	6.9	7.0	6.9	6.7	6.8	---	---	---
15	6.9	6.8	6.8	7.2	6.9	7.0	7.0	6.5	6.7	---	---	---
16	6.9	6.7	6.8	7.1	6.9	7.0	6.9	6.6	6.8	---	---	---
17	7.2	6.8	7.0	7.2	7.0	7.1	6.9	6.8	6.9	---	---	---
18	7.1	6.8	6.9	7.1	6.8	7.0	6.9	6.8	6.9	---	---	---
19	7.1	6.9	7.0	7.5	6.8	7.0	7.0	6.7	6.8	---	---	---
20	7.2	6.9	7.1	7.5	6.9	7.2	7.1	6.9	7.0	---	---	---
21	7.1	6.9	7.0	7.4	6.9	7.1	7.1	6.9	7.0	---	---	---
22	7.0	6.8	6.9	7.5	6.8	7.2	7.0	6.9	7.0	---	---	---
23	7.0	6.8	6.9	7.5	6.9	7.1	---	---	---	---	---	---
24	---	---	---	7.5	6.9	7.2	---	---	---	---	---	---
25	---	---	---	7.4	6.9	7.2	---	---	---	---	---	---
26	---	---	---	7.4	6.9	7.2	---	---	---	---	---	---
27	---	---	---	7.2	6.9	7.1	---	---	---	---	---	---
28	---	---	---	7.6	6.9	7.1	---	---	---	---	---	---
29	---	---	---	7.2	6.9	7.1	---	---	---	---	---	---
30	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
31	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
MONTH PERIOD	7.6	6.3	7.0	---	---	---	---	---	---	---	---	---

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, JUNE TO SEPTEMBER 1972

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	6.7	7.0	6.5	6.6	5.4	6.0
2	---	---	---	---	---	---	6.0	7.2	6.3	6.2	5.7	6.6
3	---	---	---	---	---	---	6.6	6.9	7.0	6.0	5.1	6.5
4	---	---	---	---	---	---	6.1	6.5	7.7	6.1	6.4	6.4
5	---	---	---	---	---	---	6.5	7.5	7.4	6.4	5.5	6.3
6	---	---	---	---	---	---	6.4	7.6	6.0	6.3	5.8	6.1
7	---	---	---	---	---	---	7.4	7.1	7.5	6.0	5.7	6.8
8	---	---	---	---	---	---	6.6	6.6	7.8	6.0	6.1	6.6
9	---	---	---	---	---	---	7.7	6.9	7.3	6.5	4.7	6.3
10	---	---	---	6.5	6.6	6.3	6.4	7.0	7.4	6.9	5.5	6.8
11	---	---	---	6.5	7.8	6.2	6.6	7.3	6.1	6.6	5.4	6.3
12	---	---	---	6.5	7.6	6.2	6.4	7.2	7.4	6.7	5.1	6.3
13	---	---	---	6.3	7.3	7.4	7.4	7.0	7.6	6.6	4.5	6.2
14	---	---	---	6.6	7.3	7.4	7.0	6.4	6.5	6.7	5.2	6.4
15	---	---	---	6.6	7.0	7.7	7.0	6.7	6.4	---	---	---
16	---	---	---	7.4	6.4	7.0	7.6	6.3	7.0	---	---	---
17	---	---	---	7.6	6.3	6.9	7.6	6.5	7.0	---	---	---
18	---	---	---	6.6	6.6	7.6	7.1	6.1	6.7	---	---	---
19	---	---	---	7.4	6.6	7.0	6.3	7.0	7.8	---	---	---
20	---	---	---	7.5	6.1	6.8	7.7	6.7	7.1	---	---	---
21	---	---	---	7.0	6.7	7.2	7.5	6.7	7.0	---	---	---
22	---	---	---	7.9	6.6	7.3	6.6	6.5	7.5	7.2	6.6	7.0
23	---	---	---	7.7	6.4	7.0	6.6	7.5	6.2	7.4	6.5	6.9
24	---	---	---	7.5	6.7	6.8	6.6	7.0	6.0	7.2	6.1	6.4
25	---	---	---	6.0	6.2	7.1	7.9	6.2	7.3	6.8	6.0	6.4
26	---	---	---	6.6	6.9	7.7	6.0	6.6	7.4	6.6	6.1	6.3
27	---	---	---	6.8	7.0	6.0	7.7	6.3	7.4	6.0	5.2	5.6
28	---	---	---	6.5	7.3	7.9	7.2	5.6	6.2	6.0	5.1	5.4
29	---	---	---	6.2	7.4	7.8	7.4	5.8	6.6	5.6	4.2	4.8
30	---	---	---	6.6	7.2	7.8	6.9	6.4	6.7	5.2	4.6	4.8
31	---	---	---	6.7	7.3	6.0	7.4	5.6	6.5	---	---	---
MONTH PERIOD	9.7	4.2	7.0	---	---	---	9.7	5.6	7.4	---	---	---

TEMPERATURE (°C) OF WATER, JUNE TO SEPTEMBER 1972

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	18.5	20.5	22.5	18.5	20.5	20.5	18.5	19.5	22.5	20.5	21.5
2	21.5	20.0	20.5	21.5	20.0	20.5	21.5	20.0	20.5	21.5	20.0	20.5
3	21.0	20.5	21.0	21.0	20.5	21.0	21.0	20.5	21.0	20.5	19.5	20.0
4	22.0	20.0	21.0	22.0	20.0	21.0	22.0	20.0	21.0	20.5	19.0	19.0
5	22.0	20.0	21.0	22.0	20.0	21.0	22.0	20.0	21.0	20.5	18.0	19.0
6	22.5	19.5	21.0	22.5	19.5	21.0	22.5	19.5	21.0	21.0	18.0	19.0
7	21.0	20.0	20.5	21.0	20.0	20.5	21.0	20.0	20.5	21.0	18.0	19.5
8	20.5	19.0	20.0	20.5	19.0	20.0	20.5	19.0	20.0	21.0	18.5	20.0
9	21.0	19.0	20.0	21.0	19.0	20.0	21.0	19.0	20.0	20.5	19.5	20.0
10	20.0	18.0	19.0	20.0	18.0	19.0	20.0	18.0	19.0	20.0	17.5	19.0
11	20.5	17.5	19.0	20.5	17.5	19.0	19.5	17.0	18.5	19.5	17.0	18.5
12	21.5	17.5	19.5	21.5	17.5	19.5	19.0	18.0	18.5	20.0	17.0	18.5
13	20.0	18.0	19.0	20.0	18.0	19.0	22.0	18.0	20.0	18.5	18.0	18.5
14	22.0	17.5	20.0	22.0	17.5	20.0	22.0	20.5	21.0	19.5	18.5	19.0
15	19.0	18.5	19.0	24.0	18.5	21.5	20.5	19.0	19.5	19.5	17.0	18.0
16	19.0	16.5	17.5	24.0	22.0	23.0	20.0	17.5	19.0	20.0	17.5	18.5
17	19.5	16.0	18.0	25.0	23.0	24.0	19.5	18.5	19.0	21.5	18.5	19.5
18	19.5	18.5	19.0	24.5	19.0	22.0	20.0	18.5	19.0	22.5	20.0	21.5
19	19.0	18.0	18.5	25.5	22.0	23.5	20.0	17.0	18.5	22.0	20.0	21.5
20	19.0	18.5	18.0	25.0	23.0	23.5	22.5	19.0	20.5	20.0	18.0	19.0
21	19.5	18.0	18.0	23.5	21.0	22.5	23.0	20.0	21.5	18.0	16.5	17.0
22	17.0	15.0	16.5	24.0	21.5	23.0	21.5	20.0	21.0	18.0	16.5	17.0
23	16.5	14.5	15.5	26.0	23.5	24.5	21.0	17.5	19.5	17.0	15.5	16.0
24	20.5	20.5	20.5	26.5	24.5	25.5	21.0	19.0	20.0	18.5	15.5	16.0
25	20.5	20.5	20.5	25.0	24.0	24.5	22.5	20.5	21.0	17.5	15.5	16.5
26	20.5	20.5	20.5	23.5	21.5	22.5	22.5	20.5	21.0	19.0	16.5	18.0
27	22.5	20.0	21.5	22.5	20.0	21.5	22.5	20.0	21.0	20.5	18.5	19.5
28	23.0	20.5	22.0	23.0	20.5	22.0	24.5	22.5	23.5	19.5	18.0	19.0
29	23.5	20.5	22.0	23.5	20.5	22.0	23.5	22.0	23.0	18.0	16.5	17.5
30	23.0	20.5	22.0	23.0	20.5	22.0	22.5	23.5	21.5	17.0	15.5	16.5
31	22.0	20.5	21.5	22.0	20.5	21.5	22.0	21.0	21.5	---	---	---
MONTH	20.5	17.0	20.5	24.5	17.0	20.5	24.5	17.0	20.5	22.5	15.5	19.0
PERIOD	20.5	14.5	20.0									

CONNECTICUT RIVER BASIN

01183750 CONNECTICUT RIVER AT AGAWAM, MASS.
(Formerly published as 01184000 Connecticut River at Thompsonville, Conn.)

LOCATION.--Lat 42°02'57", long 72°36'35", Hampden County, on right bank at Agawam, Mass., 1.4 miles upstream from Massachusetts-Connecticut State line, and 4.5 miles upstream from gaging station at Thompsonville, Conn.

DRAINAGE AREA.--9,661 sq mi at gage at Thompsonville, Conn.

PERIOD OF RECORD.--Chemical analyses: January 1969 to September 1972.
Water temperatures: January 1969 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum, 194 micromhos Feb. 5; minimum, 61 micromhos Apr. 18.

pH: Maximum, 8.5 July 18; minimum, 5.8 Oct. 26.

Dissolved oxygen: Maximum recorded, 14.8 mg/l Apr. 9; minimum, 2.1 mg/l Aug. 25.

Water temperatures: Maximum, 27.5°C July 24, 25; minimum, freezing point on several days during winter period.

Period of record:

Specific conductance: Maximum, 217 micromhos Feb. 9, 1971; minimum, 49 micromhos Apr. 23, 1969.

pH: Maximum, 9.7 Aug. 9, 1970; minimum, 5.8 Oct. 26, 1971.

Dissolved oxygen: Maximum, 15.9 mg/l Feb. 17, 1971; minimum, 1.0 mg/l Aug. 20, 1971.

Water temperatures: Maximum, 31.5°C Aug. 16, 1970; minimum, freezing point on several days during winter periods of 1970-72 water years.

REMARKS.--Figures of daily discharge for gaging station at Thompsonville, Conn. (sta 01184000) are used for this site. Samples for previously published monthly chemical analyses were taken at gaging station at Thompsonville.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	150	144	148	155	142	150	124	111	117	113	103	108
2	151	141	145	148	138	145	120	110	116	160	109	128
3	153	143	149	---	---	---	130	101	123	172	109	143
4	156	147	151	---	---	---	134	125	130	124	113	118
5	146	141	144	141	136	139	132	129	131	121	110	117
6	144	140	142	140	130	134	142	128	132	121	111	119
7	142	132	138	142	133	138	189	145	158	127	118	123
8	138	132	136	134	131	133	157	91	115	129	122	126
9	141	132	136	132	123	128	96	88	91	177	124	141
10	140	135	139	132	123	128	98	90	94	179	141	165
11	---	---	---	136	128	132	101	91	96	135	105	115
12	---	---	---	136	129	132	90	76	80	108	97	102
13	---	---	---	136	123	131	86	76	79	116	100	106
14	---	---	---	145	130	138	98	82	89	117	98	106
15	138	132	135	150	138	145	106	97	102	98	87	94
16	136	132	134	138	131	134	104	96	100	114	98	105
17	138	131	134	149	138	145	94	76	82	115	107	112
18	143	138	141	146	138	142	82	76	77	124	108	116
19	---	---	---	142	132	140	88	81	85	124	119	122
20	141	136	138	138	130	134	100	89	95	120	113	115
21	135	133	134	136	132	134	106	100	104	126	110	119
22	139	132	137	139	132	135	110	102	105	126	122	124
23	142	132	138	131	122	126	110	100	106	128	122	125
24	141	132	136	132	122	127	154	106	118	173	126	135
25	152	143	147	143	132	136	146	92	111	143	114	130
26	152	144	150	167	147	155	144	88	99	129	100	117
27	143	140	141	162	143	150	127	97	107	116	104	112
28	---	---	---	159	138	149	105	94	102	125	113	119
29	138	131	135	148	134	142	103	95	98	129	120	125
30	135	130	132	149	124	132	104	94	96	137	123	132
31	142	133	136	---	---	---	107	100	103	141	131	136
MONTH	156	130	140	167	122	138	189	76	105	179	87	121

347

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	136	120	131	177	144	157	96	93	95	---	---	---
2	130	120	125	163	148	156	95	85	89	---	---	---
3	142	120	129	156	116	128	86	74	79	---	---	---
4	---	---	---	123	100	109	86	72	77	---	---	---
5	194	136	160	114	99	106	93	86	91	---	---	---
6	135	120	129	119	102	110	97	93	95	---	---	---
7	146	128	135	140	100	115	108	95	100	---	---	---
8	149	133	141	140	121	126	107	98	100	---	---	---
9	132	121	127	127	100	120	102	99	101	---	---	---
10	137	130	132	123	110	117	102	99	101	---	---	---
11	132	129	131	120	101	117	105	100	102	---	---	---
12	130	125	128	142	109	121	102	98	100	---	---	---
13	180	129	144	123	109	120	98	91	94	---	---	---
14	186	122	153	126	109	119	92	83	87	---	---	---
15	120	105	109	134	109	122	82	76	78	---	---	---
16	111	100	108	150	123	134	82	77	80	---	---	---
17	114	103	109	159	112	131	79	66	71	---	---	---
18	121	111	116	108	79	90	65	61	62	---	---	---
19	122	110	115	82	76	79	---	---	---	---	---	---
20	130	100	123	90	82	85	---	---	---	---	---	---
21	134	123	130	96	87	92	---	---	---	---	---	---
22	126	122	124	100	91	96	---	---	---	---	---	---
23	129	120	126	88	71	76	---	---	---	---	---	---
24	137	109	126	75	71	73	---	---	---	94	90	92
25	158	125	135	80	72	76	---	---	---	95	91	92
26	144	128	136	89	81	85	---	---	---	97	94	95
27	176	138	151	91	87	89	---	---	---	101	96	98
28	189	147	163	96	91	93	---	---	---	110	100	106
29	181	109	153	98	94	96	---	---	---	115	108	111
30	---	---	---	98	94	96	---	---	---	115	100	111
31	---	---	---	96	92	94	---	---	---	116	108	113
MONTH	194	100	132	177	71	107	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	104	92	98	84	73	81	124	109	119	135	128	131
2	75	68	71	77	64	71	123	118	121	136	131	132
3	83	70	78	86	76	81	126	120	122	138	134	136
4	92	85	90	---	---	---	127	123	125	140	132	135
5	92	87	90	---	---	---	127	122	125	144	138	141
6	96	86	91	---	---	---	125	120	122	143	133	137
7	104	95	100	---	---	---	128	121	124	144	137	141
8	102	89	99	---	---	---	130	123	126	148	136	139
9	104	91	101	---	---	---	131	123	128	150	144	147

CONNECTICUT RIVER BASIN

01183750 CONNECTICUT RIVER AT AGAWAM, MASS.--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.3	7.2	7.3	7.2	7.1	7.1	---	---	---
2	---	---	---	---	---	---	7.2	7.1	7.1	---	---	---
3	---	---	---	---	---	---	7.2	7.0	7.1	---	---	---
4	---	---	---	---	---	---	7.1	7.1	7.1	7.1	6.9	6.9
5	---	---	---	---	---	---	7.1	7.1	7.1	6.9	6.9	6.9
6	6.7	6.4	6.5	---	---	---	7.1	7.0	7.1	6.9	6.8	6.8
7	6.7	6.6	6.6	---	---	---	7.1	7.0	7.1	6.8	6.7	6.8
8	6.8	6.6	6.7	---	---	---	7.1	7.0	7.1	6.8	6.7	6.8
9	6.9	6.6	6.7	---	---	---	7.0	7.0	7.0	6.7	6.6	6.7
10	6.6	6.4	6.5	---	---	---	7.0	7.0	7.0	6.8	6.6	6.7
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	6.8	6.7	6.8
13	---	---	---	---	---	---	---	---	---	6.9	6.8	6.8
14	---	---	---	---	---	---	---	---	---	6.9	6.8	6.9
15	---	---	---	---	---	---	---	---	---	7.0	6.9	6.9
16	---	---	---	---	---	---	---	---	---	7.0	6.9	7.0
17	---	---	---	---	---	---	---	---	---	7.1	7.0	7.1
18	---	---	---	---	---	---	---	---	---	7.2	7.1	7.1
19	---	---	---	---	---	---	---	---	---	---	---	---
20	7.7	7.0	7.4	---	---	---	---	---	---	---	---	---
21	7.7	7.0	7.4	---	---	---	---	---	---	---	---	---
22	7.5	6.1	7.0	---	---	---	---	---	---	---	---	---
23	7.4	6.2	6.9	---	---	---	---	---	---	---	---	---
24	7.0	6.0	6.3	7.2	7.1	7.1	---	---	---	---	---	---
25	6.1	5.9	6.0	7.2	7.0	7.1	---	---	---	---	---	---
26	7.5	5.8	6.5	7.1	7.0	7.1	---	---	---	---	---	---
27	7.3	7.2	7.2	7.1	7.0	7.1	---	---	---	---	---	---
28	---	---	---	7.1	7.0	7.0	---	---	---	---	---	---
29	7.0	6.7	6.9	7.1	7.1	7.1	---	---	---	---	---	---
30	7.2	6.8	7.0	7.1	7.0	7.1	---	---	---	---	---	---
31	7.3	7.0	7.1	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.7	6.7	6.7	6.9	6.8	6.8	---	---	---
2	---	---	---	6.8	6.7	6.8	6.9	6.8	6.8	---	---	---
3	---	---	---	6.9	6.8	6.8	6.9	6.8	6.8	---	---	---
4	---	---	---	7.0	6.9	6.9	7.1	6.8	6.9	---	---	---
5	---	---	---	7.0	7.0	7.0	7.1	6.9	7.0	---	---	---
6	---	---	---	7.1	7.0	7.0	6.9	6.9	6.9	---	---	---
7	---	---	---	7.2	7.0	7.1	6.9	6.8	6.9	---	---	---
8	---	---	---	7.1	7.0	7.0	6.9	6.8	6.9	---	---	---
9	---	---	---	7.1	7.0	7.0	6.9	6.8	6.8	---	---	---
10	---	---	---	7.1	6.9	7.0	6.8	6.8	6.8	---	---	---
11	6.0	6.8	6.8	7.0	6.9	7.0	6.8	6.7	6.8	---	---	---
12	6.0	6.8	6.9	7.0	6.9	6.9	6.8	6.7	6.7	---	---	---
13	6.0	6.7	6.8	6.9	6.9	6.9	7.0	6.7	6.8	---	---	---
14	6.9	6.8	6.9	7.0	6.8	6.9	7.0	6.9	6.9	---	---	---
15	7.0	6.9	6.9	6.9	6.8	6.8	6.9	6.8	6.9	---	---	---
16	7.0	6.9	6.9	6.9	6.8	6.8	7.0	6.9	7.0	---	---	---
17	6.9	6.9	6.9	6.8	6.7	6.8	7.0	6.9	6.9	---	---	---
18	6.9	6.8	6.8	6.8	6.7	6.7	6.9	6.8	6.8	---	---	---
19	6.9	6.8	6.7	6.8	6.7	6.8	---	---	---	---	---	---
20	6.9	6.7	6.8	6.8	6.8	6.8	---	---	---	---	---	---
21	6.9	6.8	6.8	6.8	6.7	6.8	---	---	---	---	---	---
22	6.9	6.8	6.8	7.0	6.8	6.9	---	---	---	---	---	---
23	6.8	6.7	6.8	6.8	6.8	6.8	---	---	---	---	---	---
24	6.8	6.7	6.8	6.8	6.7	6.8	---	---	---	---	---	---
25	6.8	6.7	6.7	6.9	6.8	6.8	---	---	---	6.7	6.6	6.6
26	6.7	6.7	6.7	6.9	6.8	6.9	---	---	---	6.6	6.5	6.5
27	6.8	6.7	6.7	6.9	6.9	6.9	---	---	---	6.5	6.4	6.5
28	6.9	6.6	6.6	7.0	6.9	6.9	---	---	---	6.6	6.5	6.5
29	6.7	6.6	6.7	6.9	6.9	6.9	---	---	---	6.5	6.4	6.5
30	---	---	---	7.0	6.8	6.9	---	---	---	6.4	6.4	6.4
31	---	---	---	6.9	6.8	6.8	---	---	---	---	---	---
MONTH	---	---	---	7.2	6.7	6.9	---	---	---	---	---	---

CONNECTICUT RIVER BASIN

01183750 CONNECTICUT RIVER AT AGAWAM, MASS.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.4	11.8	12.1	14.1	11.3	13.4	---	---	---
2	12.9	12.1	12.5	12.7	12.0	12.2	12.9	10.7	12.4	---	---	---
3	---	---	---	13.4	12.8	12.6	12.5	11.3	13.0	---	---	---
4	---	---	---	12.7	13.2	12.5	12.7	12.5	13.3	---	---	---
5	12.2	12.7	12.5	12.4	13.2	13.3	14.3	12.9	13.5	---	---	---
6	---	---	---	12.5	12.0	12.2	12.7	10.2	11.3	---	---	---
7	12.7	12.4	12.6	12.0	12.4	12.7	12.7	10.2	11.3	---	---	---
8	12.4	12.1	12.7	12.7	12.4	12.5	12.7	10.2	11.3	---	---	---
9	12.7	12.0	12.5	12.4	12.6	12.5	12.7	11.9	12.9	---	---	---
10	12.5	12.3	12.5	12.1	12.5	12.5	14.4	12.2	13.6	---	---	---
11	12.8	12.2	12.5	12.8	12.5	12.7	14.5	12.2	13.7	---	---	---
12	12.4	12.1	12.3	12.7	12.3	12.5	12.4	10.9	12.5	---	---	---
13	12.3	11.7	12.1	12.4	12.3	12.5	12.4	10.0	11.6	---	---	---
14	12.0	12.1	12.6	12.4	12.3	12.4	12.7	11.3	12.0	---	---	---
15	12.2	12.0	12.5	12.0	12.4	12.7	12.4	12.5	13.0	---	---	---
16	---	---	---	12.2	11.1	11.0	12.4	12.8	12.1	---	---	---
17	---	---	---	12.0	10.0	11.7	12.4	10.5	12.2	---	---	---
18	---	---	---	12.9	10.4	12.0	11.5	10.3	11.0	---	---	---
19	---	---	---	14.3	11.2	13.7	12.0	10.3	11.9	---	---	---
20	---	---	---	12.4	8.7	11.5	---	---	---	---	---	---
21	---	---	---	12.3	11.0	12.9	---	---	---	---	---	---
22	---	---	---	13.1	13.0	13.1	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	13.3	11.5	12.9	---	---	---	9.4	8.4	9.2
25	---	---	---	14.1	10.7	12.7	---	---	---	9.7	8.8	9.4
26	---	---	---	12.7	9.3	11.8	---	---	---	9.8	8.9	9.3
27	---	---	---	12.5	9.8	12.5	---	---	---	10.3	8.9	9.6
28	---	---	---	14.4	10.3	12.7	---	---	---	10.2	8.5	9.2
29	12.2	12.0	12.1	14.6	12.4	13.8	---	---	---	9.3	8.3	8.9
30	---	---	---	14.4	14.0	14.2	---	---	---	9.0	8.0	8.5
31	---	---	---	14.5	13.9	14.2	---	---	---	8.1	6.3	7.3
MONTH	---	---	---	14.6	8.7	12.8	---	---	---	---	---	---

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	6.8	5.3	5.9	6.2	4.4	5.3
2	---	---	---	---	---	---	6.7	5.2	5.9	5.8	3.6	4.5
3	---	---	---	---	---	---	6.5	4.9	5.5	4.9	3.0	4.0
4	---	---	---	---	---	---	6.5	4.3	5.4	6.2	3.9	4.8
5	---	---	---	---	---	---	7.2	5.3	6.2	5.1	3.1	4.3
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	7.8	5.7	6.7	4.9	2.5	3.7
8	---	---	---	---	---	---	6.4	5.5	6.1	5.3	2.9	4.2
9	---	---	---	---	---	---	7.1	5.4	6.1	7.3	3.5	5.4
10	---	---	---	7.8	7.4	7.6	7.1	5.1	6.0	5.7	3.3	4.6
11	---	---	---	---	---	---	7.5	5.5	6.4	6.4	3.8	4.9
12	---	---	---	8.6	7.3	8.0	7.6	5.6	6.5	7.5	4.2	5.5
13	---	---	---	6.7	7.5	8.6	7.8	5.7	6.7	6.3	4.4	5.4
14	---	---	---	8.1	6.4	7.2	7.2	5.7	6.4	5.5	3.5	4.2
15	---	---	---	7.5	6.5	7.1	7.2	5.2	6.2	4.3	3.3	3.7
16	---	---	---	7.7	6.6	7.2	7.0	4.7	5.9	5.4	3.0	4.3
17	---	---	---	8.0	6.6	7.6	8.2	4.8	6.6	5.8	4.7	5.2
18	---	---	---	10.3	4.4	8.2	8.0	5.2	6.5	6.2	4.7	5.2
19	---	---	---	10.7	6.9	9.0	7.2	5.1	6.0	---	---	---
20	---	---	---	9.2	4.7	7.9	7.6	5.0	6.2	---	---	---
21	---	---	---	7.1	5.7	6.4	8.4	4.3	6.7	---	---	---
22	---	---	---	6.9	5.8	6.2	7.7	5.1	6.5	---	---	---
23	---	---	---	7.1	5.7	6.4	7.6	4.5	6.1	5.4	4.8	5.1
24	---	---	---	7.3	5.9	6.5	6.2	3.9	5.1	5.7	4.2	5.1
25	---	---	---	7.7	6.0	6.9	5.6	2.7	4.1	6.8	4.6	5.6
26	---	---	---	8.1	4.5	7.4	4.8	2.1	3.5	6.6	5.1	5.9
27	---	---	---	8.9	6.7	7.8	5.4	2.7	3.9	6.4	4.2	5.4
28	---	---	---	4.7	6.6	7.6	4.7	2.8	3.6	5.7	3.8	4.8
29	---	---	---	9.0	6.7	7.9	5.0	2.7	3.9	5.9	3.6	4.8
30	---	---	---	8.5	7.0	7.6	7.0	4.4	5.9	5.0	4.1	4.7
31	---	---	---	7.5	6.4	7.0	6.1	4.8	5.4	4.8	3.3	3.9
MONTH	---	---	---	6.7	5.7	6.3	6.7	4.9	5.7	---	---	---
YEAR	14.8	2.1	9.3	---	---	---	8.4	2.1	5.7	7.5	2.5	4.8

CONNECTICUT RIVER BASIN

351

01183750 CONNECTICUT RIVER AT AGAWAM, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	19.5	20.0	17.0	15.5	16.5	3.5	2.5	3.0	1.0	0.0	0.5
2	22.0	19.0	20.5	16.5	16.0	16.5	3.0	1.5	2.5	1.0	0.5	1.0
3	21.0	19.5	20.5	---	---	---	3.0	1.5	2.5	1.5	0.0	1.0
4	20.5	19.0	20.0	---	---	---	2.5	2.0	2.5	1.5	0.5	1.0
5	20.5	19.0	20.0	14.0	13.0	13.5	2.5	0.0	1.5	1.5	1.0	1.5
6	20.0	19.0	20.0	13.0	12.5	12.5	1.5	1.0	1.5	1.5	0.5	1.0
7	19.0	17.5	18.5	12.5	11.0	12.0	2.5	1.5	2.0	1.5	0.5	1.0
8	18.0	17.0	17.5	11.0	9.5	10.5	2.0	1.5	1.5	1.5	0.5	1.0
9	17.0	15.5	16.5	9.5	9.0	9.5	2.5	1.5	2.0	1.5	0.5	1.0
10	17.0	16.0	16.5	9.0	8.0	8.5	3.5	2.5	3.0	2.5	1.0	1.5
11	---	---	---	8.5	8.0	8.5	4.5	3.5	4.0	1.5	1.0	1.5
12	---	---	---	8.0	7.5	7.5	4.0	3.0	3.0	2.5	1.0	1.5
13	---	---	---	8.0	7.0	7.5	3.5	2.5	3.0	2.5	1.5	2.0
14	---	---	---	7.5	6.0	7.0	3.5	2.5	3.0	3.0	2.0	2.5
15	17.0	16.5	16.5	7.0	6.0	6.5	3.5	2.5	3.0	2.0	1.0	1.5
16	17.0	16.0	16.5	7.0	6.0	6.5	4.5	3.0	4.0	1.0	0.0	0.5
17	17.5	16.5	17.0	7.0	6.0	6.5	4.5	4.0	4.5	1.0	0.5	0.5
18	16.5	16.0	16.0	7.0	6.5	6.5	4.0	2.5	3.0	1.0	0.0	1.0
19	---	---	---	8.0	6.5	7.0	2.5	1.0	1.5	1.5	0.5	1.0
20	17.0	16.0	16.5	7.5	7.0	7.5	2.0	1.0	1.5	1.0	0.5	1.0
21	16.5	15.5	16.0	7.0	6.5	7.0	2.5	1.5	2.0	1.5	0.5	1.0
22	16.0	15.0	15.5	7.0	6.5	7.0	2.5	1.5	2.0	1.5	0.5	1.0
23	16.5	15.5	16.0	7.0	5.5	6.0	1.5	0.5	1.0	2.5	1.0	2.0
24	16.0	15.0	15.5	5.5	4.5	5.0	2.0	0.5	1.5	3.0	1.5	2.5
25	15.0	14.5	15.0	5.0	2.0	3.5	2.0	1.0	1.5	3.5	2.5	3.0
26	15.5	14.5	15.0	3.5	3.0	3.5	1.5	0.5	1.0	2.0	1.0	1.5
27	15.0	15.0	15.0	4.0	3.5	3.5	2.5	1.5	2.0	1.5	0.5	1.0
28	---	---	---	4.5	3.5	4.0	3.5	2.5	3.0	1.0	0.0	1.0
29	16.5	16.0	16.5	4.0	3.5	4.0	3.0	2.5	3.0	1.5	0.0	1.0
30	17.0	16.0	16.5	4.0	3.5	3.5	3.0	1.5	2.0	1.5	1.0	1.5
31	16.0	15.5	16.0	---	---	---	1.5	0.5	1.0	2.0	0.5	1.0
MONTH	22.0	14.5	17.0	17.0	2.0	8.0	4.5	0.0	2.5	3.5	0.0	1.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.0	1.0	1.5	4.0	2.0	3.0	5.0	3.0	4.0	---	---	---
2	1.5	1.0	1.5	3.5	2.5	3.0	5.5	4.0	5.0	---	---	---
3	1.5	1.0	1.0	2.5	1.0	2.0	4.0	3.0	3.5	---	---	---
4	1.5	1.0	1.5	1.5	0.5	1.0	4.0	2.5	3.5	---	---	---
5	1.5	1.0	1.0	1.5	1.0	1.0	3.5	2.0	3.0	---	---	---
6	1.0	0.0	0.5	2.0	0.5	1.0	4.5	3.5	4.0	---	---	---
7	1.5	0.5	1.0	2.5	0.5	1.5	4.5	4.0	4.0	---	---	---
8	1.5	0.5	1.0	3.0	2.0	2.5	4.5	3.5	4.0	---	---	---
9	2.0	0.5	1.0	3.0	1.0	2.0	5.5	4.0	5.0	---	---	---
10	2.0	1.0	1.5	2.5	1.0	2.0	6.0	5.0	5.5	---	---	---
11	2.0	0.0	1.5	2.0	1.0	1.5	6.0	5.0	5.5	---	---	---
12	1.5	1.0	1.0	2.5	1.5	2.0	6.5	5.0	6.0	---	---	---
13	1.5	1.0	1.5	3.0	2.0	2.5	6.5	5.5	6.0	---	---	---
14	2.0	1.0	1.5	3.0	1.5	2.0	5.5	4.0	5.0	---	---	---
15	2.0	0.5	1.5	1.5	1.0	1.0	5.5	4.0	5.0	---	---	---
16	2.5	1.0	1.5	3.5	1.0	2.5	6.0	4.0	5.0	---	---	---
17	1.5	1.0	1.0	3.0	2.0	3.0	7.0	6.0	6.5	---	---	---
18	2.0	1.0	1.5	2.5	1.5	2.0	6.5	5.5	6.0	---	---	---
19	1.5	0.0	1.0	2.5	1.5	2.0	---	---	---	---	---	---
20	1.5	0.5	1.0	2.5	2.0	2.5	---	---	---	---	---	---
21	1.0	0.5	0.5	3.5	2.0	3.0	---	---	---	---	---	---
22	2.5	0.5	1.0	4.5	3.0	3.5	---	---	---	---	---	---
23	1.5	0.5	1.0	3.5	2.5	3.0	---	---	---	---	---	---
24	1.5	0.5	1.0	3.0	2.5	2.5	---	---	---	17.5	16.0	17.0
25	2.5	1.0	1.5	2.5	2.0	2.5	---	---	---	17.5	16.5	17.0
26	1.5	1.0	1.0	3.0	2.0	2.5	---	---	---	17.5	16.5	17.0
27	2.0	0.5	1.5	3.0	2.0	2.5	---	---	---	17.5	16.0	17.0
28	3.5	1.0	2.5	3.5	2.0	2.5	---	---	---	18.0	16.0	17.5
29	3.0	2.0	2.5	5.0	3.0	4.0	---	---	---	19.5	17.0	18.5
30	---	---	---	5.5	5.0	5.0	---	---	---	19.5	18.0	18.5
31	---	---	---	5.0	3.5	4.0	---	---	---	19.5	19.0	19.5
MONTH	3.5	0.0	1.5	5.5	0.5	2.5	---	---	---	---	---	---

01183750 CONNECTICUT RIVER AT AGAWAM, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

[illegible]

CONNECTICUT RIVER BASIN

353

01184000 CONNECTICUT RIVER AT THOMPSONVILLE, CONN.
(International Hydrological Decade River Station and radiochemical program)

LOCATION.--Lat 41°59'14" long 72°36'12", Hartford County, at gaging station on canal of Connecticut Light and Power Co., 1 mile downstream from Thompsonville, 3 miles downstream from Massachusetts-Connecticut State line, 4.5 miles downstream from multiple-parameter monitor at Agawam, Mass., and at mile 68.2.

DRAINAGE AREA.--9,661 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1955 to September 1956, January 1966 to September 1972.
Water temperatures: October 1955 to September 1956.

REMARKS.--Additional chemical analyses for this station in radiochemical and pesticide tables and in table of composited samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PH (UNITS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (CCCL. PER 100 ML)	STREP- TOCOCCI (CCCL- ONIES PER 100 ML)
OCT. 14...	15.0	18.0	7610	124	7.0	69	7.1	160000	10000	1700
NOV. 11...	8.0	5.0	6700	118	8.4	70	7.7	380000	8800	3000
DEC. 09...	2.5	6.0	14200	105	11.5	84	7.5	26000	5200	2000
JAN. 13...	2.5	4.5	14200	122	8.3	61	7.6	7800	4000	3200
FEB. 10...	1.0	-3.0	8080	225	9.5	67	7.2	40000	5000	2000
MAR. 09...	1.5	-1.0	13600	145	12.1	86	7.2	58000	2600	8000
APR. 13...	6.0	3.0	24000	115	10.4	81	7.2	10000	2300	1400
MAY 11...	8.0	16.0	63000	72	10.5	88	7.2	2100	550	470
JUNE 08...	17.5	17.5	21200	96	8.2	85	7.2	20000	1600	350
JULY 13...	23.0	21.5	17000	118	8.0	92	7.6	2300	1700	480
AUG. 17...	21.0	23.0	4520	124	7.1	79	6.4	17000	10000	400
SEP. 14...	21.0	25.5	4040	148	4.2	47	6.5	40000	15000	160

DATE	PHENOLS (UG/L)	COLOR (PLAT- INUM- CORALY UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	OIL AND GREASE (MG/L)	CYANIDE (CN) (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
JULY 13...	6	--	--	--	--	--	--	--	--
SEP. 14...	8	15	4.1	50	.02	8	.1	5	117

CONNECTICUT RIVER BASIN

01184000 CONNECTICUT RIVER AT THOMPSONVILLE, CONN.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (Mg) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)
OCT. 14...	4.3	13	1.7	7.5	1.8	34	14	12	.1	.12	--	--
NOV. 11...	--	13	1.9	--	--	33	11	13	--	.15	--	--
DEC. 09...	5.5	8.0	1.8	--	--	21	12	14	--	.070	--	--
JAN. 13...	--	9.5	1.9	--	--	24	12	13	--	.059	--	--
FEB. 10...	--	11	2.6	--	--	30	15	15	--	.10	--	--
MAR. 09...	--	10	1.7	--	--	30	18	12	--	.094	--	--
APR. 13...	--	10	1.5	6.9	1.1	24	12	13	--	.050	--	--
MAY 11...	--	6.8	.9	--	--	15	4.6	4.0	--	.063	--	--
JUNE 08...	--	10	1.1	--	--	26	8.2	12	--	.058	--	--
JULY 13...	4.6	12	1.7	6.0	1.1	32	9.5	12	.1	.002	1.4	.76
AUG. 17...	3.5	12	1.5	8.2	1.3	33	12	16	.1	.20	3.8	.89
SEP. 14...	3.6	14	2.2	9.8	1.8	38	13	16	.1	.17	1.7	.86

DATE	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	TUR- BID- ITY (JTU)	CHEN- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (Mn) (UG/L)
OCT. 14...	--	--	.40	.72	39	12	28	1	18	3.2	190	40
NOV. 11...	--	--	.40	.49	40	13	27	1	20	1.3	--	--
DEC. 09...	--	--	.30	.48	27	10	17	2	13	1.5	--	--
JAN. 13...	--	--	.40	.31	32	12	20	1	11	3.9	--	--
FEB. 10...	--	--	.90	.56	38	14	25	4	14	1.3	--	--
MAR. 09...	--	--	.50	.48	32	7	25	3	13	6.4	--	--
APR. 13...	--	--	.40	.66	31	11	20	2	12	.7	--	--
MAY 11...	--	--	.30	.90	21	8	12	4	18	.4	--	--
JUNE 08...	--	--	.40	.43	29	8	21	2	8	2.6	--	--
JULY 13...	.37	.033	.30	.59	37	11	26	2	10	1.2	150	0
AUG. 17...	2.6	.023	.30	.66	36	9	27	1	13	14	130	0
SEP. 14...	.50	.062	.30	.84	44	13	31	2	14	36	70	50

DATE	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	DDT IN BOTTOM DE- POSITS (UG/KG)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	PCB IN BOTTOM DE- POSITS (UG/KG)
OCT. 18...	.0	.0	.0	.0	.0	.6	.0	.0	E40

E Estimated.

HUDSON RIVER BASIN

355

01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS.

LOCATION.--Lat 42°44'28", long 73°12'47", Berkshire County, multiple-parameter monitor on right bank 0.3 mile upstream from Massachusetts-Vermont State line, 2 miles northwest of Williamstown, and 3.9 miles downstream from gaging station on Hoosic River near Williamstown.

DRAINAGE AREA.--203 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1968 to September 1972.
Water temperatures: November 1968 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum recorded, 554 micromhos Feb. 29; minimum, 59 micromhos Apr. 19.

pH: Maximum recorded, 8.9 May 30; minimum, 6.5 Oct. 31.

Dissolved oxygen: Maximum, 14.7 mg/l Dec. 31; minimum, 1.1 mg/l Sept. 27.

Water temperatures: Maximum, 25.0°C Aug. 27; minimum, 0.3°C many days during winter period.

Period of record:

Specific conductance: Maximum, 560 micromhos Aug. 20, 1970; minimum, 59 micromhos Apr. 19, 1972.

pH: Maximum, 9.9 Dec. 24, 1970; minimum, 5.8 July 5, 1970.

Dissolved oxygen: Maximum, 16.5 mg/l Feb. 15, 1971; minimum, 0.0 mg/l July 24, 25, 27, 28, 1970.

Water temperatures: Maximum, 26.5°C July 27, 1970; minimum, freezing point on several days in water years 1970-71.

REMARKS.--Figures of daily discharge (computed on basis of records for gaging station near Williamstown and for Green River near Williamstown) are available in district office. Additional chemical analyses for this station in radiochemical and pesticide tables and in table of composited samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	pH	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	TIME- DATE COLI- FORM PER 100 ML
OCT.								
06...	1500	130	359	7.3	8.0	15.4	11.7	>40000
NOV.								
02...	1530	190	174	4.3	7.8	15.8	20.0	E217000
DEC.								
07...	1600	1100	192	12.2	7.7	2.5	1.2	470000
JAN.								
04...	1430	480	210	12.2	7.9	2.7	5.1	45000
FEB.								
08...	1500	220	290	13.2	8.2	.5	--	18000
MAR.								
08...	1400	423	250	12.3	8.0	3.6	.0	47000
APR.								
04...	1430	480	190	12.6	7.5	2.5	1.8	340000
MAY								
02...	1700	1700	82	10.8	7.4	9.1	29.0	220
JUNE								
14...	1500	580	205	9.1	7.9	18.0	29.0	170000
JULY								
12...	1300	380	231	9.7	8.4	20.0	32.0	21000
AUG.								
09...	1203	130	310	8.2	7.9	18.0	29.0	410000
SEP.								
13...	1500	100	420	5.2	7.5	17.0	18.0	83000

DATE	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUR- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)	TUR- BID- ITY (ITU)
OCT.								
06...	26000	.50	1.4	.28	.07	18	.3	3
NOV.								
02...	37100	.70	2.0	.61	.08	39	8.0	13
DEC.								
07...	14030	.45	.49	.32	.04	29	22	20
JAN.								
04...	16000	.60	.68	.16	.06	14	.8	10
FEB.								
08...	8600	1.3	.83	.17	.05	12	3.0	8
MAR.								
08...	15000	.90	.88	.18	.04	14	4.8	10
APR.								
04...	21000	.80	.90	.17	.08	11	.2	8
MAY								
02...	30	.50	.37	.15	.02	13	.0	15
JUNE								
14...	5700	.90	1.0	.13	.03	18	.9	20
JULY								
12...	8000	1.2	.79	.17	.03	13	1.4	7
AUG.								
09...	29000	1.1	1.0	.27	.05	12	3.3	20
SEP.								
13...	29000	1.6	1.3	.30	.06	9	1.5	10

HUDSON RIVER BASIN

01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (MG) (UG/L)
SEP. 13...	60	60	44	12	30	2.5	0	4	<.5

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTANT TUNTS) (MG/L)	COLOR (PLATINUM-COBALT UNITS)
SEP. 13...	160	24	2.5	.01	220	--	248	244	10

DATE	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)
SEP. 13...	165	35	31	.3	.050	1.0	8.3	135	0

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	352	287	322	308	222	256	244	218	235	212	165	194
2	335	281	298	295	232	266	251	220	232	261	177	192
3	---	---	---	248	193	213	266	216	236	306	207	241
4	---	---	---	284	213	239	---	---	---	262	220	238
5	---	---	---	302	225	259	---	---	---	270	234	246
6	---	---	---	278	230	249	---	---	---	---	---	---
7	---	---	---	243	194	220	---	---	---	279	186	223
8	---	---	---	---	---	---	---	---	---	214	176	192
9	---	---	---	---	---	---	---	---	---	220	173	200
10	---	---	---	---	---	---	---	---	---	260	203	219
11	---	---	---	---	---	---	---	---	---	269	160	199
12	177	160	169	---	---	---	---	---	---	---	---	---
13	215	168	186	---	---	---	---	---	---	222	100	183
14	234	181	205	---	---	---	---	---	---	193	167	181
15	239	203	218	---	---	---	---	---	---	209	177	192
16	259	209	220	---	---	---	---	---	---	182	133	146
17	223	200	206	---	---	---	---	---	---	162	138	146
18	247	200	219	272	225	249	---	---	---	183	158	174
19	279	227	250	295	245	268	---	---	---	227	180	196
20	313	233	259	298	240	266	---	---	---	246	174	198
21	283	239	259	234	208	218	---	---	---	213	172	192
22	305	243	271	240	203	208	---	---	---	239	186	203
23	303	251	266	268	213	212	---	---	---	254	208	226
24	267	236	246	283	223	257	---	---	---	249	191	208
25	237	214	226	291	231	251	---	---	---	294	186	231
26	293	211	238	280	218	248	---	---	---	302	181	237
27	294	241	268	218	199	210	---	---	---	303	181	232
28	317	246	285	221	202	212	---	---	---	---	---	---
29	312	258	287	230	207	224	---	---	---	230	189	213
30	317	240	276	239	223	231	190	186	188	267	219	237
31	277	234	246	262	192	235	212	178	209	262	221	234
MONTH	---	---	---	---	---	---	201	177	206	267	223	236
										233	210	222
										274	213	234
										306	100	209

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	308	241	260	531	355	426	195	165	184	---	---	---
2	302	249	265	157	147	152	172	154	162	---	---	---
3	308	251	279	157	151	---	---	---	---	105	89	96
4	474	261	345	224	148	177	241	199	217	96	82	91
5	301	248	266	205	167	181	236	262	213	109	88	101
6	257	227	241	222	192	204	244	262	217	129	109	119
7	277	229	247	251	203	221	362	215	250	131	121	126
8	302	256	280	268	227	246	262	218	229	147	125	134
9	337	273	297	275	228	247	226	212	216	128	112	119
10	349	283	306	319	234	263	369	266	230	144	124	134
11	346	281	306	307	216	239	325	214	257	153	137	145
12	346	274	296	219	207	210	262	204	234	164	140	154
13	444	257	291	259	213	234	226	177	208	186	166	177
14	374	194	244	293	240	256	227	222	225	---	---	---
15	305	219	256	300	231	263	235	228	232	---	---	---
16	288	237	249	374	267	303	237	175	197	172	146	154
17	317	251	271	379	129	214	182	178	180	175	98	154
18	308	261	275	169	125	149	---	---	---	118	91	105
19	303	248	261	188	163	176	92	59	88	146	118	132
20	252	233	245	210	190	201	87	63	75	161	141	148
21	253	237	245	232	209	217	103	86	92	163	142	150
22	297	246	267	221	121	182	116	97	107	171	164	166
23	308	272	288	138	116	127	113	97	106	182	174	178
24	350	267	308	176	142	158	97	67	91	190	183	187
25	387	310	346	195	162	169	109	83	93	---	---	---
26	374	283	320	178	169	173	---	---	---	---	---	---
27	352	268	291	197	173	185	---	---	---	---	---	---
28	418	317	360	221	191	201	---	---	---	---	---	---
29	554	360	424	226	186	204	---	---	---	---	---	---
30	---	---	---	206	182	193	---	---	---	254	239	244
31	---	---	---	222	198	197	---	---	---	292	139	213
MONTH	554	194	287	531	116	213	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	140	98	108	144	113	128	394	325	352	443	365	403
2	154	125	144	161	148	154	407	380	373	460	384	416
3	173	150	160	173	126	144	407	357	381	407	364	374
4	167	155	162	141	111	123	397	344	369	367	348	354
5	187	159	168	168	150	161	414	323	353	401	364	378
6	212	153	187	182	164	173	361	323	340	440	353	384
7	155	129	142	198	181	188	389	321	343	460	380	406
8	172	140	162	200	192	197	360	260	309	436	349	377
9	150	115	128	209	200	205	350	286	319	419	359	372
10	151	134	143	216	208	212	381	292	326	368	327	340
11	161	147	154	215	210	212	400	368	356	378	333	348
12	187	160	173	233	213	224	429	336	355	483	380	423
13	206	184	194	246	233	242	359	324	337	471	374	417
14	238	205	216	258	243	249	363	314	332	360	218	279
15	239	208	221	287	246	259	393	315	345	329	223	274
16	248	209	225	274	235	257	402	336	364	356	273	307
17	238	200	209	290	238	251	474	358	409	345	314	327
18	222	205	216	311	257	283	462	388	415	406	306	335
19	266	209	233	378	268	316	472	385	417	404	310	349
20	242	200	220	322	238	284	453	370	391	355	289	323
21	265	222	240	326	268	300	382	330	354	396	319	360
22	279	222	246	314	263	279	424	342	380	459	360	410
23	225	140	184	287	210	247	459	382	417	465	349	391
24	180	163	175	250	218	229	503	467	445	398	360	377
25	138	120	131	284	232	258	560	412	452	468	333	366
26	130	119	124	307	265	285	484	396	430	470	349	399
27	162	131	147	354	301	327	434	387	408	494	407	444
28	184	165	176	381	314	339	397	245	306	502	417	458
29	206	189	197	389	323	342	358	254	308	524	431	466
30	210	102	166	342	315	328	441	313	371	502	423	445
31	---	---	---	391	316	338	435	348	387	---	---	---
MONTH	279	98	178	391	111	244	503	245	369	524	218	377
YEAR	554	59	248									

HUDSON RIVER BASIN

01333300 MOOSIC RIVER BELOW WILLIAMSTOWN, MASS.—Continued

PH UNITS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	7.6	7.9	7.4	7.0	7.1	7.8	7.6	7.7	8.5	7.9	8.1
2	8.1	7.9	8.0	7.8	7.5	7.3	8.1	7.6	7.9	8.1	7.9	8.0
3	---	---	---	8.0	7.7	7.8	8.3	7.7	7.9	8.4	7.9	8.0
4	---	---	---	8.4	7.8	8.0	---	---	---	8.3	7.9	8.0
5	---	---	---	8.7	7.8	8.1	---	---	---	8.5	8.0	8.2
6	---	---	---	8.4	7.7	8.0	---	---	---	---	---	---
7	---	---	---	7.9	7.7	7.9	---	---	---	8.6	8.0	8.1
8	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
9	---	---	---	---	---	---	---	---	---	8.5	7.9	8.0
10	---	---	---	---	---	---	---	---	---	8.0	7.9	8.0
11	---	---	---	---	---	---	---	---	---	8.3	7.7	7.9
12	8.2	7.8	7.9	---	---	---	---	---	---	---	---	---
13	8.6	7.5	7.8	---	---	---	---	---	---	8.0	7.7	7.9
14	8.3	7.5	7.8	---	---	---	---	---	---	8.2	7.7	7.8
15	8.1	7.6	7.8	---	---	---	---	---	---	8.2	7.6	7.9
16	8.6	7.5	7.7	---	---	---	---	---	---	8.1	7.6	7.7
17	7.8	7.5	7.6	---	---	---	---	---	---	8.0	7.5	7.7
18	7.8	7.6	7.6	8.4	7.9	8.2	---	---	---	7.7	7.6	7.7
19	8.1	7.6	7.8	8.5	8.0	8.3	---	---	---	8.3	7.7	7.8
20	8.1	7.5	7.7	8.5	7.9	8.1	---	---	---	---	---	---
21	8.1	7.4	7.6	8.3	7.9	8.0	---	---	---	---	---	---
22	8.0	7.4	7.6	8.6	8.0	8.3	---	---	---	---	---	---
23	7.3	6.9	7.1	8.5	7.8	8.1	---	---	---	---	---	---
24	7.1	6.9	7.0	8.5	7.8	8.0	---	---	---	---	---	---
25	7.3	7.1	7.1	8.5	7.8	8.1	---	---	---	8.0	7.0	7.8
26	7.6	7.1	7.2	---	---	---	---	---	---	8.3	7.6	7.8
27	7.5	7.1	7.3	7.9	7.8	7.8	---	---	---	---	---	---
28	7.6	6.9	7.1	8.0	7.7	7.8	---	---	---	8.2	7.1	7.8
29	7.2	6.9	7.0	7.9	7.6	7.7	---	---	---	8.4	7.5	7.9
30	7.6	7.0	7.2	7.7	7.5	7.6	8.2	8.0	8.1	8.2	7.5	7.8
31	7.3	6.5	6.9	8.0	7.5	7.7	8.6	7.9	8.1	8.3	7.7	8.0
MONTH	---	---	---	---	---	---	8.5	7.9	8.1	8.4	7.8	8.0
										8.6	7.0	7.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.4	7.9	8.1	8.7	7.7	8.0	7.7	7.5	7.6	---	---	---
2	8.4	7.9	8.1	8.2	7.7	7.8	7.9	7.5	7.7	---	---	---
3	8.5	8.2	8.2	7.9	7.5	7.7	---	---	---	---	---	---
4	8.3	7.8	8.0	8.1	7.4	7.7	7.8	7.6	7.7	7.7	7.4	7.5
5	8.4	7.7	7.9	7.7	7.6	7.7	8.4	7.5	7.8	7.5	7.3	7.4
6	7.9	7.7	7.8	8.5	7.7	8.0	---	---	---	---	---	---
7	8.5	7.7	7.9	8.6	7.6	7.9	8.3	7.7	7.9	7.7	7.4	7.5
8	8.3	7.6	8.0	8.2	7.6	7.9	8.3	7.6	7.8	7.7	7.5	7.6
9	8.6	7.6	8.0	8.3	7.8	7.9	8.0	7.6	7.8	7.8	7.5	7.6
10	8.3	7.6	7.9	8.7	7.7	8.0	8.6	7.5	7.9	7.7	7.5	7.6
11	8.3	7.7	7.9	---	---	---	---	---	---	7.9	7.6	7.7
12	8.6	7.6	7.8	8.8	7.5	7.8	8.2	7.6	7.8	8.0	7.6	7.7
13	7.9	7.7	7.8	7.8	7.7	7.8	8.5	7.6	8.0	7.9	7.6	7.7
14	7.8	7.6	7.7	8.5	7.7	7.9	8.1	7.8	7.9	7.9	7.7	7.8
15	8.3	7.5	7.7	8.3	7.6	7.8	8.0	7.5	7.8	7.8	7.5	7.7
16	8.2	7.6	7.7	---	---	---	7.9	7.7	7.8	7.9	7.7	7.8
17	8.4	7.6	7.9	8.2	7.7	7.9	7.9	7.7	7.8	8.1	7.6	7.8
18	8.4	7.6	7.8	8.5	7.7	7.9	7.8	7.5	7.7	8.0	7.6	7.7
19	8.5	7.6	7.8	7.8	7.7	7.8	---	---	---	7.6	7.4	7.5
20	7.8	7.7	7.7	8.2	7.8	7.9	7.7	7.2	7.5	7.7	7.5	7.6
21	7.9	7.7	7.8	---	---	---	7.6	7.3	7.4	7.7	7.5	7.6
22	8.2	7.6	7.8	8.4	7.6	7.9	7.5	7.3	7.4	7.7	7.5	7.6
23	8.2	7.6	7.8	7.7	7.4	7.6	7.6	7.3	7.4	7.8	7.4	7.6
24	8.3	7.7	7.9	7.8	7.5	7.6	7.5	7.3	7.4	7.8	7.4	7.5
25	8.5	7.6	7.9	8.2	7.5	7.6	7.3	7.2	7.3	7.7	7.4	7.5
26	8.5	7.7	7.9	---	---	---	7.6	7.1	7.3	---	---	---
27	8.8	7.7	7.9	7.7	7.4	7.6	---	---	---	---	---	---
28	8.7	7.8	8.1	8.0	7.5	7.7	---	---	---	---	---	---
29	8.7	7.9	8.1	8.2	7.6	7.8	---	---	---	---	---	---
30	---	---	---	8.2	7.6	7.8	---	---	---	---	---	---
31	---	---	---	7.9	7.6	7.7	---	---	---	---	---	---
MONTH	8.7	7.5	7.9	8.1	7.5	7.7	---	---	---	8.9	8.0	8.6
				8.7	7.4	7.8	---	---	---	8.4	7.7	7.9

01333300 MOOSIC RIVER BELOW WILLIAMSTOWN, MASS.--Continued

PH UNITS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.5	7.7	7.8	7.6	7.7	8.3	7.4	7.8	7.9	7.6	7.7
2	8.0	7.6	7.8	7.8	7.0	7.7	8.0	7.4	7.6	7.8	7.5	7.7
3	8.1	7.6	7.9	7.8	7.7	7.7	7.9	7.3	7.5	7.8	7.5	7.7
4	8.1	7.8	7.9	7.8	7.6	7.6	8.1	7.3	7.6	7.8	7.5	7.6
5	8.6	7.8	8.1	8.2	7.0	7.8	8.0	7.2	7.4	7.9	7.6	7.7
6	8.8	7.7	8.5	8.2	8.0	8.1	8.2	7.2	7.7	7.9	7.6	7.7
7	7.0	7.6	7.7	8.3	8.0	8.1	7.7	7.3	7.5	8.2	7.6	7.9
8	8.0	7.5	7.7	8.1	7.0	8.0	7.6	7.3	7.4	8.0	7.7	7.8
9	7.6	7.6	7.5	8.2	7.7	7.9	8.1	7.4	7.6	7.9	7.5	7.7
10	7.7	7.6	7.5	8.0	7.7	7.8	7.9	7.4	7.4	7.8	7.4	7.6
11	7.8	7.5	7.7	8.1	7.7	7.9	8.1	7.4	7.6	7.8	7.3	7.6
12	8.2	7.5	7.8	8.4	7.6	7.9	7.8	7.4	7.6	7.7	7.3	7.5
13	8.0	7.7	7.8	8.0	7.7	7.8	8.0	7.2	7.6	7.6	7.2	7.4
14	8.0	7.6	7.7	8.3	7.7	7.9	7.8	7.5	7.6	7.7	7.4	7.5
15	8.1	7.5	7.7	8.5	7.8	8.1	8.0	7.5	7.7	7.9	7.4	7.6
16	7.0	7.5	7.7	8.4	7.8	8.2	8.0	7.5	7.7	8.0	7.4	7.6
17	8.1	7.2	7.8	8.8	7.0	8.3	8.1	7.6	7.9	7.9	7.5	7.6
18	8.2	7.6	7.9	8.7	7.0	8.1	7.8	7.6	7.7	7.8	7.5	7.6
19	8.0	7.7	7.9	8.7	7.0	8.2	8.0	7.5	7.7	7.6	7.5	7.5
20	8.0	7.5	7.8	8.5	7.8	8.0	8.1	7.6	7.7	7.8	7.4	7.6
21	8.2	7.6	7.9	8.1	7.7	7.9	8.1	7.4	7.6	7.8	7.5	7.6
22	8.2	7.6	7.9	8.2	7.7	8.0	8.2	7.3	7.6	8.0	7.6	7.7
23	8.1	7.8	7.9	8.1	7.6	7.9	8.1	7.4	7.7	8.1	7.6	7.8
24	8.0	7.7	7.9	8.3	7.8	8.0	8.1	7.3	7.5	7.8	7.6	7.7
25	7.8	7.6	7.7	8.2	7.7	7.9	8.1	7.4	7.6	7.9	7.5	7.7
26	7.7	7.5	7.6	8.4	7.8	8.0	8.1	7.4	7.6	7.9	7.5	7.7
27	8.3	7.5	7.9	8.5	7.7	8.0	8.1	7.5	7.6	7.7	7.5	7.6
28	8.2	7.6	7.8	8.4	7.7	7.9	7.8	7.4	7.6	7.8	7.5	7.6
29	8.1	7.6	7.8	8.3	7.6	7.9	8.2	7.6	7.8	7.8	7.5	7.6
30	8.0	7.8	7.8	8.4	7.6	7.9	8.1	7.6	7.8	7.7	7.4	7.5
31	---	---	---	8.2	7.6	7.8	8.0	7.5	7.7	---	---	---
MONTH	8.8	7.8	7.8	8.8	7.8	7.9	8.3	7.2	7.6	8.2	7.2	7.6
YEAR	8.0	8.8	7.8									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.3	7.8	8.6	8.8	8.0	8.9	11.3	11.0	11.1	14.6	14.0	14.4
2	8.0	8.1	8.3	7.3	8.2	8.5	12.1	10.9	11.7	14.2	13.6	13.9
3	---	---	---	7.4	8.4	8.7	12.3	11.0	11.8	14.0	13.5	13.8
4	---	---	---	8.8	8.1	7.6	---	---	---	13.6	13.1	13.4
5	---	---	---	8.2	8.6	7.7	---	---	---	14.2	12.9	13.7
6	---	---	---	8.1	8.0	7.9	---	---	---	14.6	13.1	13.7
7	---	---	---	8.7	8.2	7.5	---	---	---	13.4	12.6	13.1
8	---	---	---	---	---	---	---	---	---	13.4	12.6	13.1
9	---	---	---	---	---	---	---	---	---	13.1	12.2	12.7
10	---	---	---	---	---	---	---	---	---	13.1	11.9	12.5
11	---	---	---	---	---	---	---	---	---	13.4	12.7	13.1
12	8.6	8.8	8.0	---	---	---	---	---	---	13.6	13.1	13.3
13	10.8	8.3	8.2	---	---	---	---	---	---	13.2	12.3	12.8
14	8.0	8.0	8.0	---	---	---	---	---	---	13.9	12.4	13.5
15	8.6	8.6	7.5	---	---	---	---	---	---	14.2	13.5	13.9
16	8.6	8.5	7.5	---	---	---	---	---	---	14.0	13.7	13.8
17	8.4	7.3	8.2	11.7	9.8	10.6	---	---	---	13.5	13.0	13.3
18	8.6	7.1	8.4	10.8	8.7	8.5	---	---	---	12.9	12.1	12.6
19	7.8	8.4	7.2	10.6	8.3	8.2	---	---	---	12.4	11.9	12.2
20	8.2	8.7	7.1	10.7	8.1	8.8	---	---	---	13.0	12.2	12.6
21	7.8	8.2	7.0	11.5	10.1	10.6	---	---	---	13.0	12.1	12.8
22	8.1	8.4	8.8	11.2	10.4	10.7	---	---	---	13.2	12.3	12.9
23	7.8	8.0	8.7	12.0	10.0	11.2	---	---	---	12.8	12.3	12.5
24	8.3	8.7	8.8	12.0	8.3	10.9	---	---	---	12.9	12.4	12.7
25	8.3	8.6	7.3	11.8	9.4	10.8	---	---	---	13.1	11.8	12.5
26	8.0	8.8	8.1	12.1	9.3	10.9	---	---	---	12.9	12.4	12.7
27	7.3	8.0	8.8	12.3	10.8	11.4	---	---	---	12.8	12.1	12.4
28	7.4	7.3	8.3	11.7	9.4	10.4	---	---	---	12.1	11.4	11.8
29	7.8	8.2	8.6	11.2	10.2	10.4	13.4	12.8	13.2	12.3	11.5	11.9
30	8.2	8.7	8.4	11.3	9.9	10.7	14.0	12.0	13.7	---	---	---
31	8.2	7.3	7.2	---	---	---	14.7	13.7	14.3	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	14.6	11.4	13.0

HUDSON RIVER BASIN

01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.7	11.1	12.1	12.6	11.2	11.9	---	---	---
2	---	---	---	13.2	12.4	12.9	12.6	11.6	12.3	---	---	---
3	---	---	---	---	---	---	---	---	---	10.5	10.1	10.4
4	12.8	12.6	12.7	---	---	---	12.6	11.8	12.1	10.4	9.8	10.1
5	13.6	12.7	13.3	---	---	---	12.8	11.5	12.1	10.2	9.9	10.1
6	13.5	12.8	13.2	---	---	---	12.4	11.4	11.9	10.3	7.5	9.2
7	13.3	12.0	13.0	---	---	---	12.7	11.5	12.0	8.9	7.6	8.4
8	13.2	12.2	12.7	12.9	12.5	12.7	12.5	11.2	11.8	8.7	8.4	8.6
9	13.0	11.0	12.7	13.5	12.6	13.2	12.6	10.9	11.7	10.3	7.4	8.9
10	13.0	11.0	12.6	13.5	12.2	13.1	12.1	10.6	11.4	10.4	9.3	10.1
11	12.8	11.6	12.4	13.7	12.6	13.1	12.0	10.6	11.4	9.8	8.5	9.3
12	12.7	11.5	12.2	12.9	12.3	12.6	12.4	10.7	11.4	---	---	---
13	12.3	10.0	11.9	13.0	11.6	12.3	12.5	10.8	12.0	---	---	---
14	12.8	11.5	12.5	12.6	11.2	12.2	12.4	11.7	12.2	---	---	---
15	13.1	12.2	12.7	12.9	11.8	12.5	12.6	11.8	12.3	---	---	---
16	13.1	12.5	12.7	12.6	11.4	11.9	12.2	11.3	11.8	9.8	8.7	9.6
17	13.5	12.8	12.8	12.4	11.0	12.1	12.2	10.5	11.8	9.6	8.6	9.1
18	13.2	11.5	12.6	12.6	12.1	12.3	---	---	---	9.6	8.6	9.3
19	13.2	11.7	12.6	---	---	---	12.4	11.1	11.9	9.0	8.2	8.6
20	13.7	12.9	13.3	---	---	---	13.0	11.8	12.4	8.1	7.3	7.8
21	13.8	12.8	13.3	13.5	12.1	12.7	13.2	13.0	13.1	7.5	6.4	6.9
22	13.4	12.0	13.1	13.0	12.1	12.5	13.0	11.9	12.5	6.2	5.4	5.9
23	13.4	12.4	12.9	13.2	12.6	12.9	12.4	10.0	12.0	5.4	4.7	5.1
24	13.1	12.8	12.7	13.2	12.7	13.0	12.4	11.3	11.7	4.8	3.6	4.2
25	13.5	11.7	12.9	13.3	12.7	13.0	12.3	10.8	11.6	---	---	---
26	13.3	11.9	12.9	13.3	12.4	12.9	---	---	---	---	---	---
27	13.8	12.5	13.2	12.9	12.5	12.7	---	---	---	---	---	---
28	13.0	12.0	12.5	13.3	12.4	12.8	---	---	---	---	---	---
29	12.6	11.0	12.0	13.1	11.7	12.4	---	---	---	---	---	---
30	---	---	---	12.6	11.6	12.2	---	---	---	9.3	7.3	8.2
31	---	---	---	12.7	11.7	12.2	---	---	---	9.9	6.3	8.5
MONTH	13.9	10.0	12.7	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	9.2	9.0	9.1	8.2	3.7	5.9	---	---	---
2	---	---	---	9.4	9.0	9.2	6.7	3.4	5.3	---	---	---
3	---	---	---	9.1	8.4	8.9	7.1	3.8	5.7	---	---	---
4	---	---	---	9.9	6.4	9.3	9.1	4.2	6.2	---	---	---
5	---	---	---	9.5	8.2	9.1	9.0	4.8	6.4	---	---	---
6	9.7	8.4	9.1	8.6	7.7	9.1	9.3	5.3	6.8	---	---	---
7	10.0	8.2	9.7	8.2	7.0	7.6	7.6	5.6	6.5	7.6	2.8	3.4
8	10.6	8.6	10.1	8.5	7.0	7.7	7.3	4.6	6.4	6.9	2.3	4.5
9	11.2	9.4	9.9	8.7	6.8	7.8	8.2	4.0	5.7	7.4	3.0	4.4
10	10.3	8.1	9.9	8.4	7.5	7.9	---	---	---	8.3	4.1	5.3
11	10.0	7.1	10.2	8.4	7.3	7.9	---	---	---	9.1	3.6	5.5
12	9.5	7.2	7.7	9.8	6.6	7.9	---	---	---	7.2	2.6	4.3
13	---	---	---	7.9	6.8	7.6	---	---	---	6.6	2.3	3.9
14	---	---	---	7.6	6.2	6.8	---	---	---	7.6	5.1	6.5
15	9.0	7.1	8.1	7.7	5.9	6.6	---	---	---	8.6	5.1	7.1
16	9.4	6.6	7.8	---	---	---	---	---	---	8.2	4.9	6.4
17	9.2	7.7	9.4	---	---	---	---	---	---	8.9	4.5	6.3
18	9.3	7.5	8.3	---	---	---	---	---	---	7.9	2.8	5.0
19	9.0	7.5	8.2	8.6	5.7	7.2	---	---	---	5.6	2.6	3.9
20	9.7	7.6	8.3	7.0	4.9	6.2	---	---	---	8.2	3.6	5.9
21	9.6	6.8	7.8	6.8	4.3	5.8	---	---	---	8.4	3.3	5.5
22	9.3	6.5	7.6	7.7	5.4	6.3	---	---	---	6.9	2.7	4.2
23	---	---	---	7.5	5.0	6.1	---	---	---	6.6	2.8	4.7
24	---	---	---	7.2	5.2	6.1	---	---	---	6.9	3.8	5.0
25	---	---	---	---	---	---	---	---	---	7.1	3.3	4.7
26	---	---	---	---	---	---	---	---	---	5.7	1.7	3.4
27	9.2	8.2	8.7	6.6	4.6	5.8	---	---	---	5.4	1.1	2.6
28	9.5	7.8	8.2	6.9	4.6	5.9	---	---	---	6.6	1.4	3.5
29	9.7	7.9	8.2	7.4	5.4	6.2	---	---	---	5.1	1.7	2.9
30	9.1	4.3	8.6	7.3	5.5	6.2	---	---	---	4.4	2.3	3.3
31	---	---	---	6.9	4.9	5.8	---	---	---	---	---	---
MONTH	---	---	---	9.8	4.3	7.3	---	---	---	8.9	1.1	4.7
YEAR	14.7	1.1	9.6	---	---	---	---	---	---	---	---	---

01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN
1	16.0	14.5	15.5	14.5	12.0	13.0	4.0	3.0	3.5	1.0	0.5	1.0
2	16.0	14.5	15.5	16.0	14.0	15.0	2.5	2.0	2.0	1.5	1.0	1.0
3	---	---	---	15.0	12.0	13.5	1.5	0.5	1.0	2.5	1.5	2.0
4	---	---	---	11.5	9.0	10.5	---	---	---	3.0	2.0	2.5
5	---	---	---	9.5	9.0	9.5	---	---	---	3.0	1.5	2.0
6	---	---	---	9.0	6.5	7.0	---	---	---	1.0	0.5	1.0
7	---	---	---	9.0	7.0	8.5	---	---	---	1.0	0.5	1.0
8	---	---	---	---	---	---	---	---	---	1.0	0.5	1.0
9	---	---	---	---	---	---	---	---	---	1.5	1.0	1.0
10	---	---	---	---	---	---	---	---	---	2.5	1.5	2.0
11	---	---	---	---	---	---	---	---	---	3.0	2.0	2.5
12	12.0	12.0	12.0	---	---	---	---	---	---	3.5	2.5	3.0
13	12.0	11.0	11.5	---	---	---	---	---	---	5.0	2.5	4.0
14	13.0	11.5	12.5	---	---	---	---	---	---	4.5	1.0	2.0
15	13.0	12.0	12.5	---	---	---	---	---	---	1.0	0.5	1.0
16	13.0	12.0	12.5	---	---	---	---	---	---	0.5	0.5	0.5
17	12.5	12.0	12.0	5.5	4.5	5.0	---	---	---	1.0	0.5	0.5
18	11.5	10.5	11.0	7.0	5.0	6.5	---	---	---	2.0	0.5	1.0
19	13.5	10.5	12.0	9.0	6.0	7.0	---	---	---	3.0	1.5	2.5
20	14.0	12.5	13.0	8.0	6.0	6.5	---	---	---	2.5	1.5	2.0
21	14.0	11.5	12.5	6.0	5.0	5.5	---	---	---	3.0	1.0	2.5
22	14.0	11.0	13.0	5.5	3.5	4.5	---	---	---	2.5	1.0	1.5
23	14.5	12.5	13.5	3.5	2.5	3.0	---	---	---	2.5	2.5	3.0
24	14.5	12.0	13.0	2.5	1.5	2.0	---	---	---	3.5	2.0	3.0
25	13.0	11.5	12.0	2.5	0.5	1.5	---	---	---	3.0	1.0	2.5
26	15.0	13.0	13.5	1.0	0.5	1.0	---	---	---	1.5	1.0	1.0
27	14.5	14.0	14.5	2.5	1.5	2.0	---	---	---	1.0	1.0	1.0
28	17.5	15.0	16.0	4.0	2.5	3.5	---	---	---	1.5	1.0	1.5
29	16.0	14.0	15.0	4.5	3.5	4.0	3.5	2.5	3.0	1.5	1.0	1.5
30	16.0	11.5	13.0	4.0	2.5	3.5	3.0	1.0	2.0	2.0	1.0	1.5
31	13.5	11.5	12.0	---	---	---	1.0	0.5	1.0	1.5	1.0	1.5
MONTH	---	---	---	---	---	---	---	---	---	5.0	0.5	1.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN
1	2.0	1.0	1.5	---	---	---	7.0	3.0	5.5	---	---	---
2	2.5	1.0	2.0	---	---	---	5.0	3.0	3.5	---	---	---
3	2.0	1.5	2.0	---	---	---	---	---	---	0.5	0.0	0.5
4	2.0	1.5	1.5	2.0	0.5	1.5	1.0	2.0	2.5	0.5	0.0	0.0
5	1.0	0.5	0.5	2.5	1.0	2.0	1.5	1.0	2.5	0.0	0.0	0.0
6	1.5	0.5	0.5	2.0	1.0	1.5	4.0	2.0	3.0	11.0	6.0	8.5
7	1.5	0.5	1.0	2.5	1.0	1.5	4.5	1.0	3.0	11.0	0.0	10.0
8	1.5	0.5	0.5	3.0	1.0	2.0	0.5	1.5	3.0	10.5	3.0	9.0
9	1.5	0.5	0.5	2.0	0.5	1.0	0.5	2.0	4.0	2.0	3.0	7.5
10	1.5	0.5	0.5	1.0	0.5	1.0	2.0	2.5	4.5	0.0	0.5	7.5
11	1.5	0.5	1.0	2.0	0.5	1.5	0.5	3.0	4.0	0.5	0.0	7.5
12	1.5	0.5	1.0	2.0	1.5	2.0	0.5	3.0	5.0	12.0	5.0	9.0
13	1.5	1.0	1.0	0.5	1.0	3.5	0.0	2.0	3.0	10.5	0.0	11.0
14	1.5	1.0	1.0	3.0	0.5	2.0	0.5	2.5	4.0	10.0	11.0	12.0
15	0.5	1.0	2.0	2.0	0.5	1.0	3.0	2.0	3.0	12.5	11.0	12.0
16	3.0	1.0	2.0	0.5	2.0	3.5	0.5	3.0	5.0	15.0	11.0	13.0
17	3.0	0.5	2.0	0.5	2.5	3.0	2.0	3.0	5.0	15.0	12.0	13.0
18	3.0	1.0	2.0	---	---	---	---	---	---	10.0	11.0	12.0
19	2.5	1.0	2.0	---	---	---	2.0	3.0	5.0	10.5	12.0	13.0
20	1.5	1.0	1.0	---	---	---	0.5	3.0	0.5	10.0	12.0	12.5
21	1.5	1.0	1.0	0.5	2.5	0.5	3.0	2.0	3.0	10.5	11.0	13.0
22	2.0	1.0	1.0	0.5	2.0	3.0	0.5	3.0	3.0	10.0	12.0	13.0
23	1.0	1.0	1.0	2.0	2.0	2.0	0.0	0.5	0.5	10.0	12.0	13.0
24	1.0	0.5	1.0	2.0	2.0	2.0	0.0	0.5	0.5	10.0	12.0	13.0
25	1.0	0.5	1.0	2.0	1.0	2.0	0.0	0.5	0.5	---	---	---
26	1.0	1.0	1.0	2.0	1.0	2.0	---	---	---	---	---	---
27	2.0	0.5	1.0	2.0	1.0	2.0	---	---	---	---	---	---
28	3.0	1.5	2.0	2.0	1.0	2.0	---	---	---	---	---	---
29	---	---	---	2.0	0.5	2.0	---	---	---	---	---	---
30	---	---	---	2.0	0.5	2.0	---	---	---	---	---	---
31	---	---	---	2.0	0.5	2.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	10.0	12.0	13.0

HUDSON RIVER BASIN

01333300 MOOSIC RIVER BELOW WILLIAMSTOWN, MASS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DAY	JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.0	13.5	14.5	15.5	13.5	14.5	21.5	17.5	19.5
2	14.5	12.5	13.5	14.5	14.0	14.0	21.0	19.0	20.0
3	17.5	12.0	15.0	14.0	16.0	15.5	21.0	19.0	20.0
4	16.5	15.0	15.5	16.5	14.5	15.5	22.0	14.5	20.0
5	17.0	14.5	15.5	15.0	13.5	14.0	21.0	16.0	18.5
6	17.0	14.0	15.5	16.0	13.0	14.5	20.0	16.0	18.5
7	15.0	13.5	14.0	16.5	13.0	14.5	19.5	17.5	18.5
8	17.5	11.5	12.5	13.0	13.5	13.5	19.5	17.5	18.5
9	15.5	13.0	14.0	19.5	16.5	18.5	21.0	16.0	19.0
10	14.5	11.0	13.0	18.0	16.0	17.0	20.0	16.0	17.5
11	14.0	10.0	12.0	20.5	16.5	18.0	20.0	14.5	17.5
12	13.5	10.0	12.0	22.5	17.0	20.0	19.0	17.0	18.0
13	15.5	12.0	13.5	20.0	18.5	19.0	21.5	17.0	19.0
14	19.5	15.0	16.0	21.5	16.0	20.0	20.5	18.0	19.5
15	21.0	16.0	18.0	24.0	19.0	21.0	20.5	16.5	18.5
16	19.0	16.5	17.5	23.0	20.5	22.0	19.0	15.5	18.0
17	20.5	15.5	17.5	24.5	20.0	22.0	17.5	14.5	16.5
18	19.5	15.5	17.5	23.5	19.5	21.5	18.0	16.5	17.5
19	19.0	16.5	17.0	24.0	21.0	22.5	18.5	17.5	18.0
20	19.5	16.0	17.5	23.5	21.0	22.0	22.0	17.5	20.0
21	19.5	17.0	17.5	22.5	20.5	21.5	22.0	17.0	19.5
22	19.0	17.0	18.0	24.5	20.5	22.5	21.5	17.5	20.0
23	18.5	16.0	18.5	24.0	21.5	22.5	22.5	19.5	20.5
24	16.5	13.0	14.0	24.0	21.0	22.5	22.5	21.0	22.0
25	13.5	13.0	13.0	23.5	20.0	21.5	24.0	22.5	23.0
26	14.0	12.0	13.0	22.0	19.0	20.0	24.5	22.0	23.0
27	15.5	12.0	14.0	22.5	18.0	20.0	24.0	21.5	23.0
28	13.0	11.5	12.0	22.5	17.5	20.0	23.5	20.0	21.0
29	14.5	11.5	13.0	22.0	18.0	20.0	23.0	19.0	20.5
30	17.0	14.5	15.5	21.0	17.5	19.5	22.5	18.5	20.5
31	---	---	---	20.0	17.5	18.5	22.0	17.5	20.0
MONTH	21.0	10.0	15.0	24.5	13.0	19.0	20.0	14.5	19.5
YEAR	20.5	6.5	13.5						

LOCATION.--Lat 42°48'33", long 73°17'12", Rensselaer County, N.Y., at bridge on New York-Vermont State Highway 346, at State line, 1.3 miles northwest of North Pownal, Vt.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1972.

REMARKS.--Additional chemical analyses for this station in radiochemical and pesticide tables.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHMS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	INME- DIATE COLI- FORM (COL PER 100 ML)
OCT.								
06...	1100	204	355	7.3	7.6	14.0	12.0	220000
NOV.								
03...	1130	440	282	7.9	7.2	14.0	16.5	240000
DEC.								
02...	1230	253	350	8.3	6.5	.0	-1.5	22000
JAN.								
06...	1130	382	475	--	7.4	.0	-11.0	13000
FEB.								
08...	1100	305	331	--	8.4	.0	-19.0	38000
MAR.								
02...	1130	1060	318	12.6	7.4	2.5	13.0	26000
APR.								
23...	1130	934	258	11.8	8.3	2.0	1.0	26000
MAY								
09...	1100	2350	134	10.8	7.8	8.0	6.8	14000
JUNE								
26...	1145	743	209	7.8	8.2	18.0	18.0	61000
JULY								
05...	1345	1050	182	9.0	7.9	15.0	19.0	37000
AUG.								
29...	0930	175	349	7.8	7.6	19.0	24.0	170000
SEP.								
07...	1130	117	409	8.8	8.1	17.5	24.0	40000

[illegible][illegible]

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)
HERRINACK RIVER BASIN										
01075000 - PENIGEWASSET RIVER AT WOODSTOCK N.H. (LAT 43 58 34 LONG 071 40 48)										
OCT., 1971										
04...	1730	101	48	10.0	6.7	13.0	11.4	>320	14	.20
MAY, 1972										
01...	1100	2800	36	13.0	6.0	4.2	14.3	300	0	.40
JUNE										
12...	1800	764	34	10.1	6.2	13.0	18.0	220	2	.20
JULY										
11...	0700	2400	30	9.3	5.8	13.5	16.5	2300	82	.20
AUG.										
07...	1600	200	46	8.8	6.4	15.5	18.5	200	29	.30
SEP.										
12...	1100	160	43	9.6	6.9	14.0	22.5	30	0	.20
NARRAGANSETT BAY										
01109150 - MOUNT HOPE BAY NEAR BRISTOL R.I. (LAT 41 39 45 LONG 071 13 45)										
DEC., 1971										
01...	1100	--	38600	4.1	7.7	6.0	1.0	350	48	.00
MAR., 1972										
01...	1345	--	33900	16.3	8.2	4.4	10.8	48	1	.00
JUNE										
06...	1200	--	36800	8.0	7.9	16.8	22.6	100	22	.00
SEP.										
09...	1145	--	42200	9.8	8.2	20.8	20.0	10	5	.00
01115000 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)										
DEC., 1971										
01...	1215	--	34700	6.5	7.4	6.0	1.0	1200	130	.00
MAR., 1972										
01...	1945	--	33000	12.1	8.0	3.6	9.4	600	120	.00
JUNE										
06...	1330	--	37800	3.7	7.7	15.2	22.2	25000	10000	.10
SEP.										
09...	1335	--	39300	3.4	8.0	20.0	21.5	2000	240	.00
01115600 - PROVIDENCE RIVER OFF CONNOR POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)										
DEC., 1971										
01...	1145	--	34100	9.4	7.5	6.0	1.0	--	120	.10
MAR., 1972										
01...	1300	--	37000	13.4	8.1	3.6	8.9	13	1	.00
JUNE										
06...	1240	--	39300	5.8	7.8	19.6	19.9	1800	26	.00
SEP.										
09...	--	--	42000	5.7	8.1	21.2	22.4	980	11	.00
01115700 - WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)										
DEC., 1971										
01...	0845	--	40400	7.0	7.8	6.9	.9	29	2	.00
MAR., 1972										
01...	0800	--	40600	7.7	--	9.9	9.4	2	0	.00
JUNE										
06...	0800	--	38300	8.8	8.8	17.2	14.4	8	1	.04
SEP.										
09...	0845	--	43000	5.9	8.1	19.5	18.8	--	--	.00
01115700 - EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)										
DEC., 1971										
01...	0800	--	41900	6.4	7.9	7.0	.9	94	9	.00
MAR., 1972										
01...	0800	--	40000	6.7	8.1	6.9	7.9	9	2	.00
JUNE										
06...	0845	--	39500	6.2	8.8	14.6	15.4	28	6	.06
SEP.										
09...	0800	--	40000	5.3	8.2	16.7	15.8	--	--	.00

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

365

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METH- YLENE BLUE ACTIVE SUB- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)	TUR- BID- ITY (JTU)	COLOR (PLAT- INUM- COBAL T UNITS)
HERRINACK RIVER BASIN									
01075000 - PEMIGWASSET RIVER AT WOODSTOCK N.H. (LAT 43 58 34 LONG 071 40 48)									
OCT., 1971	--	--	.29	.020	.02	7	.4	2	--
MAY., 1972	--	--	.25	.014	.02	12	.3	3	--
JUNF.	--	--	.65	.034	.02	16	.0	4	--
JULY	--	--	.40	.042	.04	21	4.8	10	--
AUG.	--	--	.41	.017	.00	4	.1	4	--
SEP.	--	--	.23	.014	.04	3	13	3	20
12...	.005	.34							
NARRAGANSETT BAY									
01109150 - JOINT HOPE BAY NEAR BRISTOL R.I. (LAT 41 39 45 LONG 071 13 45)									
DEC., 1971	--	--	.44	.15	.92	0	7.2	3	--
MAY., 1972	--	--	.42	.015	.96	3	8.	3	--
JUNF.	--	--	1.1	.066	1.1	20	4.1	2	--
SEP.	--	--	.51	.12	.81	17	19	8	5
05...	.007	.09							
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)									
DEC., 1971	--	--	.80	.20	.77	2	3.6	4	--
MAY., 1972	--	--	.38	.12	.88	3	53	4	--
JUNF.	--	--	.86	.12	1.2	13	2.5	3	--
SEP.	--	--	.73	.25	.75	22	18	3	5
05...	.010	.30							
01116630 - PROVIDENCE RIVER OFF CONNINICUT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)									
DEC., 1971	--	--	.82	.17	.82	3	5.7	4	--
MAY., 1972	--	--	.68	.076	.98	2	90	5	--
JUNF.	--	--	.70	.095	1.2	19	2.4	2	--
SEP.	--	--	.63	.15	.77	96	11	4	5
05...	.010	.20							
01117150 - WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)									
DEC., 1971	--	--	1.1	.15	.93	1	11	9	--
MAY., 1972	--	--	.44	.018	1.0	1	76	3	--
JUNF.	--	--	1.1	.060	1.0	5	2.5	2	--
SEP.	--	--	.50	.17	.95	90	21	9	5
05...	.006	.10							
01117160 - EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)									
DEC., 1971	--	--	.88	.200	.88	0	5.5	8	--
MAY., 1972	--	--	.45	.022	1.1	0	59	8	--
JUNF.	--	--	.70	.061	1.0	18	1.4	8	--
SEP.	--	--	.58	.17	.95	97	12	9	5
05...	.006	.10							

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MH/CM)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED NITRATE (N) (MG/L)
ST. LAWRENCE RIVER BASIN										
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)										
OCT., 1971										
05...	1400	--	255	8.5	7.7	18.0	22.0	19000	500	.30
MAY, 1972										
02...	1520	--	173	8.4	7.4	11.0	12.0	770	120	.40
JUNE										
20...	1445	--	232	--	7.5	21.0	34.0	59000	400	.50
JULY										
06...	1515	--	232	8.5	7.5	19.0	24.0	20000	800	.40
AUG.										
08...	1430	--	250	7.4	7.7	21.0	28.0	120000	1700	.40
SEP.										
06...	1530	--	235	6.6	6.2	22.0	25.0	4400	100	.40
04294408 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 06 LONG 073 23 16)										
OCT., 1971										
05...	1200	--	172	9.0	6.3	17.0	22.0	3200	170	.20
MAY, 1972										
02...	1245	--	119	9.8	7.6	8.5	12.0	480	10	.04
JUNE										
20...	1225	--	210	--	8.3	22.0	26.0	10	0	.10
JULY										
06...	1300	--	149	7.9	6.9	19.0	24.0	2300	170	.04
AUG.										
08...	1200	--	203	8.2	8.2	22.0	26.0	7900	300	.05
SEP.										
06...	1230	--	156	7.7	6.6	22.5	23.0	3800	0	.00
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)										
OCT., 1971										
05...	1100	--	198	7.9	7.6	18.0	22.0	3700	1	.20
MAY, 1972										
02...	1200	--	146	11.1	7.6	9.0	12.0	2	0	.20
JUNE										
20...	1200	--	182	--	8.0	21.0	26.5	8	0	.02
JULY										
06...	1230	--	190	7.5	7.5	20.5	24.0	6300	0	.03
AUG.										
08...	1115	--	202	8.1	8.2	22.0	24.0	5400	0	.20
SEP.										
06...	1145	--	256	7.4	6.5	22.0	23.0	0	0	.00

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

347

DATE	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METH- YLENE BLUE ACTIVE SUB- STANCE (MG/L)	CHEM- ICAL OXYGEN DEMAND LEVEL (MG/L)	CHLORO- FLOW PHVLL A (UG/L)	TUR- BID- ITY (JTU)	COLOR (PLAT- INUM- COBALT UNITS)
ST. LAWRENCE RIVER BASIN									
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)									
OCT., 1971									
05...	.010	.11	.54	.090	.03	11	4.8	20	--
MAY, 1972									
02...	--	--	.27	.036	.03	10	2.2	10	--
JUNE									
20...	--	--	.34	.056	.03	11	.7	10	--
JULY									
06...	--	--	.53	.10	.03	14	3.8	20	--
AUG.									
08...	--	--	.42	.072	.01	8	8.3	20	--
SEP.									
06...	--	--	.60	.082	.04	--	1.9	25	--
04294403 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 06 LONG 073 23 16)									
OCT., 1971									
05...	.030	.08	.62	.060	.03	18	3.8	15	--
MAY, 1972									
02...	--	--	.13	.018	.02	6	1.0	7	--
JUNE									
20...	--	--	.75	.028	.03	16	4.0	10	--
JULY									
06...	--	--	.43	.057	.01	8	2.0	10	--
AUG.									
08...	--	--	.62	.15	.02	10	9.3	15	--
SEP.									
06...	--	--	.49	.035	.02	--	3.6	8	--
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)									
OCT., 1971									
05...	.020	.15	.55	.050	.03	18	3.1	25	--
MAY, 1972									
02...	--	--	.66	.066	.03	9	.7	15	--
JUNE									
20...	--	--	.42	.041	.03	16	2.0	10	--
JULY									
06...	--	--	1.2	.064	.02	9	3.8	10	--
AUG.									
08...	--	--	.94	.066	.02	11	11	20	--
SEP.									
06...	--	--	.50	.037	.03	--	7.4	10	--

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

UNITS OF MEASUREMENT: GROSS ALPHA RADIATION, AS BOTH MICROGRAMS AND PICOCURIES OF URANIUM EQUIVALENT PER LITER OF WATER; GROSS BETA RADIATION AS BOTH STRONTIUM-90/YTTRIUM-90 AND CESIUM-137, IN PICOCURIES PER LITER OF WATER.

DATE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS- SOLVED GROSS BETA AS SR90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FIL- TRABLE RESIDUE (MG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS- PENDED GROSS BETA AS SR90 (PC/L)	SUS- PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON- FIL- TRABLE RESIDUE (MG/L)
HERRIMACK RIVER BASIN										
01075000 - PENIGWASSET RIVER AT WOODSTOCK V H (LAT 43 58 34 LONG 071 40 48)										
SEP., 1972 12...	2.9	1.0	2.1	2.6	39	2.6	.9	1.3	1.5	2
01096550 - HERRIMACK RIVER ABOVE LOWELL MASS (LAT 42 38 20 LONG 071 22 17)										
SEP., 1972 11...	<.8	<.3	2.8	3.6	73	.7	.2	.7	.8	7
HARRAGANSETT BAY										
01109150 - MOUNT HOPE BAY NEAR BRISTOL R I (LAT 41 39 45 LONG 071 13 45)										
SEP., 1972 05...	<490	<160	400	460	34000	<.4	<.1	<.4	<.4	4
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)										
SEP., 1972 05...	<360	<120	330	390	32000	<.4	<.1	.4	.5	4
01116630 - PROVIDENCE RIVER OFF CONINICUT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)										
SEP., 1972 05...	<480	<160	420	480	34000	<.4	<.1	<.4	.4	4
01117150 - WEST PASSAGE HARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)										
SEP., 1972 05...	<400	<130	360	400	35000	<.4	<.1	<.4	<.4	4
01117160 - EAST PASSAGE HARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)										
SEP., 1972 05...	<530	<180	440	480	40000	<.4	<.1	.4	.4	4
CONNECTICUT RIVER BASIN										
01141900 - CONNECTICUT RIVER AT WILDER VT (LAT 43 40 04 LONG 072 18 13)										
SEP., 1972 12...	<.7	<.2	2.9	3.2	66	<.4	<.1	<.4	<.4	1
01161200 - CONNECTICUT RIVER AT NORTHFIELD MASS (LAT 42 42 44 LONG 072 27 14)										
SEP., 1972 13...	<.8	<.3	2.4	3.0	79	<.4	<.1	.9	.5	4
01184800 - CONNECTICUT RIVER AT THOMPSONVILLE CONN (LAT 41 58 14 LONG 072 56 21)										
OCT., 1971 29...	<1.2	<.4	3.1	3.9	89	<.4	<.1	.7	.8	7
APR., 1972 13...	<.7	<.2	2.9	3.2	87	<.4	<.1	.7	.8	8

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

369

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

UNITS OF MEASUREMENT: GROSS ALPHA RADIATION, AS BOTH MICROGRAMS AND PICOCURIES OF URANIUM EQUIVALENT PER LITER OF WATER; GROSS BETA RADIATION AS BOTH STRONTIUM-90/YTTRIUM-90 AND CESIUM-137, IN PICOCURIES PER LITER OF WATER.

DATE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS- SOLVED GROSS BETA AS SR90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FIL- TRABLE RESIDUE (MG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS- PENDED GROSS BETA AS SR90 (PC/L)	SUS- PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL WLN- FIL- TRABLE RESIDUE (MG/L)
HUDSON RIVER BASIN										
01333300 - HUDSON RIVER BELOW WILLIAMSTOWN MASS (LAT 42 44 28 LONG 073 12 47)										
SEP., 1972 13...	<1.4	<1.1	3.1	3.9	260	.8	.3	1.3	1.5	12
01333350 - HUDSON RIVER NEAR NORTH POINTE, VT. (LAT 42 48 33 LONG 073 17 12)										
SEP., 1972 07...	6.4	2.1	3.2	4.0	240	<.4	<.1	.4	.5	6
ST. LAWRENCE RIVER BASIN										
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)										
SEP., 1972 06...	<1.9	<.6	3.8	4.6	130	<.4	<.1	.9	1.0	12
04294408 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 05 LONG 073 23 15)										
SEP., 1972 06...	<1.1	<.4	3.4	4.3	88	<.4	<.1	<.4	<.4	2
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)										
SEP., 1972 06...	<1.6	<.5	3.5	4.3	120	<.4	<.1	<.4	<.4	3

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- FLDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
MERRIMACK RIVER BASIN											
01075000 - PEMIGEWASSET RIVER AT WOODSTOCK N.H. (LAT 43 58 34 LONG 071 40 48)											
JULY, 1972											
11...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	--
SEP.											
12...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	--
01096550 - MERRIMACK RIVER ABOVE LOWELL MASS (LAT 42 38 20 LONG 071 22 17)											
JULY, 1972											
11...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	--
SEP.											
11...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	--
NARRAGANSETT BAY											
01109150 - MOUNT HOPE BAY NEAR BRISTOL P.I. (LAT 41 39 45 LONG 071 13 45)											
SEP., 1972											
05...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)											
SEP., 1972											
05...	.00	F.0	.00	.00	.00	.00	.01	.00	.00	.00	.00
01116530 - PROVIDENCE RIVER OFF CONIMICUT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)											
SEP., 1972											
05...	.00	F.0	.00	.00	.00	.00	.01	.00	.00	.00	.00
01117150 - WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)											
SEP., 1972											
05...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
01117160 - EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)											
SEP., 1972											
05...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
CONNECTICUT RIVER BASIN											
01141900 - CONNECTICUT RIVER AT WILDER VT (LAT 43 40 04 LONG 072 18 13)											
JULY, 1972											
11...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	--
SEP.											
12...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	--
01161200 - CONNECTICUT RIVER AT NORTHFIELD MASS (LAT 42 42 44 LONG 072 27 14)											
JULY, 1972											
12...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	--
SEP.											
13...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	--
01184000 - CONNECTICUT RIVER AT THOMPSONVILLE CONN (LAT 41 58 14 LONG 072 36 21)											
DEC., 1971											
18...	.00	--	.00	.00	.00	.00	.00	.00	.00	.00	--
DEC.											
09...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	--
MAR., 1972											
27...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	--
JUNE											
08...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	--
JULY											
15...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	--
17...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	--

E Estimated.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

371

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	LINDBAN (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	METHYL TRIPHOSPHORIC ACID (UG/L)	PARATHION (UG/L)	TOXAPHENE (UG/L)	TRIPHOSPHORIC ACID (UG/L)	PCB (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
MERRIMACK RIVER BASIN											
01075000 - PENIGEWASSETT RIVER AT WOODSTOCK N.H. (LAT 43 58 34 LONG 071 40 48)											
JULY, 1972											
11...	.00	.00	.00	.00	.00	--	.00	E.0	.00	.00	.00
SEP.											
12...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
01096550 - MERRIMACK RIVER ABOVE LOWELL MASS (LAT 42 38 20 LONG 071 22 17)											
JULY, 1972											
11...	.00	.00	.00	.00	.00	--	.00	.0	.02	.01	.01
SEP.											
11...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
HARRAGANSETT BAY											
01109150 - MOUNT HOPE BAY NEAR BRISTOL R.I. (LAT 41 39 45 LONG 071 13 45)											
SEP., 1972											
05...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)											
SEP., 1972											
05...	.00	.00	.00	.00	.00	.0	.00	E.0	.01	.00	.01
01116530 - PROVIDENCE RIVER OFF CONNICOCT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)											
SEP., 1972											
05...	.00	.00	.00	.00	.00	.0	.00	E.0	.01	.00	.00
01117150 - WEST PASSAGE HARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)											
SEP., 1972											
05...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
01117160 - EAST PASSAGE HARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)											
SEP., 1972											
05...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
CONNECTICUT RIVER BASIN											
01141900 - CONNECTICUT RIVER AT WILPOVT VT (LAT 43 40 04 LONG 072 18 13)											
JULY, 1972											
11...	.00	.00	.00	.00	.00	--	.00	.0	.00	.00	.00
SEP.											
12...	.00	.00	.00	.00	.00	.0	.00	E.0	.01	.00	.00
01142200 - CONNECTICUT RIVER AT NORTHFIELD MASS (LAT 42 42 44 LONG 072 27 14)											
JULY, 1972											
12...	.00	.00	.00	.00	.00	--	.00	.1	.00	.00	.00
SEP.											
12...	.00	.00	.00	.00	.00	.0	.00	.0	.00	.00	.00
01144000 - CONNECTICUT RIVER AT THOMPSONVILLE CONN (LAT 41 59 14 LONG 072 36 21)											
SEP., 1972											
12...	.00	.00	.00	.00	.00	--	.00	0.1	.00	.00	.00
SEP., 1972											
12...	.00	.00	.00	.00	.00	--	.00	E.1	.00	.00	.00
SEP., 1972											
12...	.00	.00	.00	.00	.00	--	.00	.0	.00	.00	.00
SEP., 1972											
12...	.00	.00	.00	.00	.00	--	.00	.0	.01	.00	.00
SEP., 1972											
12...	.00	.00	.00	.00	.00	--	.00	.0	.00	.00	.00

B. S. S. S. S.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
HUDSON RIVER BASIN											
01333300 - HOOSIC RIVER BELOW WILLIAMSTOWN MASS (LAT 42 44 28 LONG 073 12 47)											
JULY, 1972											
12...	.00	E.0	.00	.00	.00	.00	.01	.00	.00	.00	--
SEP.											
13...	.00	E.0	.00	.00	.00	.00	<.01	.00	.00	.00	.00
01333350 - HOOSIC RIVER NEAR NORTH POWNALL, VT. (LAT 42 48 33 LONG 073 17 12)											
SEP., 1972											
07...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
ST. LAWRENCE RIVER BASIN											
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)											
SEP., 1972											
06...	--	--	--	--	--	--	--	--	--	--	--
04294408 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 06 LONG 073 23 16)											
SEP., 1972											
06...	.00	F.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)											
SEP., 1972											
06...	.00	E.0	.00	.00	.00	.00	.00	.00	.00	.00	.00

E Estimated.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

373

DATE	LINDANE (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	METHYL FOSFYL- THION (UG/L)	PARA- THION (UG/L)	TOX- APHENE (UG/L)	TRI- THION (UG/L)	PCB (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
HUDSON RIVER BASIN											
01333300 - HOOSIC RIVER BELOW WILLIAMSTOWN MASS (LAT 42 44 20 LONG 073 12 47)											
JULY, 1972 12...	.00	.00	.00	.00	.00	--	.00	.1	.02	.00	.02
SEP. 13...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.01
01333350 - HOOSIC RIVER NEAR NORTH POINAIL, VT. (LAT 42 48 33 LONG 073 17 12)											
SEP., 1972 07...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.02
ST. LAWRENCE RIVER BASIN											
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)											
SEP., 1972 06...	--	--	--	--	--	--	--	--	.00	.00	.00
04294408 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 06 LONG 073 23 16)											
SEP., 1972 06...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)											
SEP., 1972 08...	.00	.00	.00	.00	.00	.0	.00	E.0	.00	.00	.00

E Estimated.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
 SUPPLEMENTAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED IRON (FF) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTASSIUM (K) (MG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BICARBONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)
HERRINACK RIVER BASIN												
01075000 - PENIGEWASSET RIVER AT WOOD BRIDGE N.H. (LAT 43 58 34 LONG 071 40 48)												
SEP., 1972 12...	430	170	3.9	.5	3.4	.6	30	3	<.5	0	6.2	5.1
NARRAGANSETT BAY												
01109150 - MOUNT HOPE BAY NEAR BRISTOL, R.I. (LAT 41 39 45 LONG 071 13 45)												
SEP., 1972 05...	50	60	360	1100	9000	370	140	2	<.5	123	2400	16000
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)												
SEP., 1972 05...	50	90	320	1000	9600	350	100	2	<.5	115	2300	15000
01116630 - PROVIDENCE RIVER OFF CONNITICUT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)												
SEP., 1972 05...	20	90	350	1100	8800	370	100	2	<.5	122	2200	16000
01117150 - WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)												
SEP., 1972 05...	50	60	360	1200	9400	380	100	2	<.5	124	2400	17000
01117160 - EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)												
SEP., 1972 05...	20	60	380	1200	9400	390	100	0	<.5	133	2300	18000
ST. LAWRENCE RIVER BASIN												
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)												
SEP., 1972 06...	--	--	20	--	--	--	20	6	<.5	97	--	--
04294400 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 00 LONG 073 23 16)												
SEP., 1972 06...	--	--	10	--	--	--	0	5	<.5	60	--	--
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)												
SEP., 1972 06...	--	--	20	--	--	--	30	8	<.5	95	--	--

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

375

SUPPLEMENTAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LITY AS CaCO ₃ (MG/L)	TOTAL ACIDITY AS CaCO ₃ (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MERRIMACK RIVER BASIN												
01075000 - PENIGEWASSET RIVER AT WOODSTOCK N H (LAT 43 58 34 LONG 071 40 48)												
SEP., 1972 12...	.7	1.6	7	0	12	5	.5	.00	.0	0	36	25
NARRAGANSETT BAY												
01109150 - MOUNT HOPE BAY NEAR BRISTOL, R.I. (LAT 41 39 45 LONG 071 13 45)												
SEP., 1972 05...	2.0	--	101	8	5400	5300	2.2	.00	2.0	1	31800	29300
01115050 - PROVIDENCE RIVER OFF FIELDS POINT NEAR PROVIDENCE, R.I. (LAT 41 47 15 LONG 071 22 35)												
SEP., 1972 05...	1.9	--	94	10	4900	4800	1.8	.00	.0	3	30000	27600
01116630 - PROVIDENCE RIVER OFF CONINICUT POINT NEAR WARWICK, R.I. (LAT 41 43 20 LONG 071 21 00)												
SEP., 1972 05...	2.0	--	100	10	5400	5300	2.9	.00	.0	7	31000	28900
01117150 - WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 31 45 LONG 071 24 00)												
SEP., 1972 05...	2.2	--	102	6	5800	5700	1.4	.01	7.0	1	31900	30800
01117160 - EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41 30 45 LONG 071 21 00)												
SEP., 1972 05...	2.2	--	109	6	5900	5800	--	.01	55	0	33000	31900
ST. LAWRENCE RIVER BASIN												
04294402 - LAKE CHAMPLAIN (EAST BAY) NEAR WHITEHALL, N.Y. (LAT 43 34 55 LONG 073 25 19)												
SEP., 1972 05...	.1	98	80	--	--	--	--	.01	2.0	--	--	--
04294408 - LAKE CHAMPLAIN NEAR TICONDEROGA NY (LAT 43 50 06 LONG 073 23 16)												
SEP., 1972 06...	.0	24	49	--	--	--	--	.01	9.0	--	--	--
04294410 - LAKE CHAMPLAIN NEAR CROWN POINT NY (LAT 43 55 25 LONG 073 24 20)												
SEP., 1972 06...	.1	46	75	--	--	--	--	.00	.0	--	--	--

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
CHEMICAL ANALYSES OF COMPOSITED SAMPLES, IN MICROGRAMS PER LITER

DATE	NUMBER OF SAMPLES	ALUM- INUM (AL)	ANTI- MONY (SB)	ARSE- NIC (AS)	BAR- IUM (BA)	BERYL- LIUM (BE)	BIS- MUTH (BI)	BORON (B)	CAD- MIUM (CD)	CHRO- MIUM (CR)	CO- BALT (CO)	COP- PER (CU)	GAL- LIUM (GA)	GER- MA- NIUM (GE)	IRON (FE)
MERRIMACK RIVER BASIN															
01075000 PEMIGEWASSET RIVER AT WOODSTOCK, N.H. (LAT 43°58'34" LONG 71°40'48")															
JUL-OCT 1971	4	150	--	--	6	<1	<1	5	<17	<1	<1	23	<1	<1	320
MAY-OCT 1972	6	310	--	--	5	<1	<1	3	<6	<1	<1	58	<1	<1	350
01096550 MERRIMACK RIVER ABOVE LOWELL, MASS. (LAT 42°38'20" LONG 71°22'17")															
JUL-DEC 1971	6	30	--	--	10	<1	<2	19	<30	7	<2	10	<1	<2	200
JAN-JUN 1972	6	130	--	--	10	<1	<1	8	<10	4	<1	9	<1	<1	130
NARRAGANSETT BAY															
01109150 MOUNT HOPE BAY NEAR BRISTOL, R.I. (LAT 41°39'45" LONG 71°13'45")															
8-31, 12-1-71	2	56	<5	<46	<95	<1	<1	2500	<10	<1	<1	<22	<94	<940	90
3-1, 6-6-72	2	33	<5	<46	<2000	<1	<1	2600	<3	1	<1	50	ND	ND	20
01115050 PROVIDENCE RIVER OFF FIELDS POINT, NEAR PROVIDENCE, R.I. (LAT 41°47'15" LONG 71°22'35")															
8-31, 12-1-71	2	66	<5	<46	<90	<1	<1	2100	<10	<1	<1	<22	<91	<910	130
3-1, 6-6-72	2	26	<5	<46	<1900	<1	<1	2100	<3	1	<1	50	ND	ND	40
01116630 PROVIDENCE RIVER OFF CONIMICUT POINT, NEAR WARWICK, R.I. (LAT 41°43'20" LONG 71°21'00")															
8-31, 12-1-71	2	37	<5	<46	<90	<1	<1	1900	<10	<1	<1	<22	<89	<890	90
3-1, 6-6-72	2	15	<5	<46	<2000	<1	<1	2700	<3	1	<1	50	ND	ND	18
01117150 WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41°31'45" LONG 71°24'00")															
8-31, 12-1-71	2	32	<5	<46	<100	<1	<1	2100	<10	<1	<1	<22	<98	<980	150
3-1, 6-6-72	2	33	<5	<46	<2000	<1	<1	2900	<3	<1	<1	50	ND	ND	60
01117160 EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41°30'45" LONG 71°21'00")															
8-31, 12-1-71	2	62	<5	<46	<100	<1	<1	2500	<10	<1	<1	<22	<99	<990	110
3-1, 6-6-72	2	15	<5	<46	<2100	<1	<1	2500	<3	<1	<1	50	ND	ND	120
CONNECTICUT RIVER BASIN															
01141900 CONNECTICUT RIVER AT WILDER, VT. (LAT 43°40'04" LONG 72°18'13")															
JUL-DEC 1971	6	44	--	--	13	<1	<2	6	<32	<2	<2	6	<1	<2	280
JAN-JUN 1972	6	80	--	--	10	<1	<1	5	<13	2	<2	15	<1	<2	170
01161200 CONNECTICUT RIVER AT NORTHFIELD, MASS. (LAT 42°42'44" LONG 72°27'14")															
JUL-NOV 1971	5	27	--	--	13	<1	<2	10	<37	<2	<2	8	<1	<2	100
APR-JUN 1972	3	72	--	--	10	<1	<1	5	<12	2	<2	7	<1	<2	100
01184000 CONNECTICUT RIVER AT THOMPSONVILLE, CONN. (LAT 41°59'14" LONG 72°36'21")															
JUL-DEC 1971	6	48	--	--	21	<1	<2	19	--	4	<2	20	<1	<4	170
JAN-JUN 1972	6	110	--	--	22	<1	<2	20	--	3	<2	14	<2	<3	280
HUDSON RIVER BASIN															
01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS. (LAT 42°44'28" LONG 73°12'47")															
JUL-DEC 1971	6	160	--	--	18	<1	<4	95	<84	16	<4	5	<1	<4	41
JAN-JUN 1972	6	150	--	--	13	<1	<2	22	<23	7	<3	4	<1	<3	33

ND - SPECIFICALLY SOUGHT, NOT DETECTED.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
CHEMICAL ANALYSES OF COMPOSITED SAMPLES, IN MICROGRAMS PER LITER

377

LAN- THA- NUM (LA)	LEAD (PB)	LITH- IUM (LI)	MAN- GANESE (MN)	MOLYB- DENUM (MO)	NICKEL (NI)	SILVER (AG)	STRON- TIUM (SR)	TIN (SN)	TITA- NIUM (TI)	VANA- DIUM (V)	YTTER- BIUM (YB)	YTTRIUM (Y)	ZINC (ZN)	ZIRCO- NIUM (ZR)	DIS- SOLVED SOLIDS (RESI- DUE AT 180°C) (MG/L)
MERRIMACK RIVER BASIN															
01075000 PEMIGEWASSET RIVER AT WOODSTOCK, N.H. (LAT 43°58'34" LONG 71°40'48")															
--	26	<10	140	<1	2	<1	14	<1	4	<1	--	--	140	<2	55
--	34	<10	93	<1	1	<1	12	1	4	<1	--	--	140	<1	40
01096550 MERRIMACK RIVER ABOVE LOWELL, MASS. (LAT 42°38'20" LONG 71°22'17")															
--	4	<10	61	<1	6	<1	41	<2	1	<1	--	--	<140	<3	99
--	3	<10	64	<1	3	<1	28	<1	<1	<1	--	--	<50	<3	71
NARRAGANSETT BAY															
01109150 MOUNT HOPE BAY NEAR BRISTOL, R.I. (LAT 41°39'45" LONG 71°13'45")															
<10	8	120	1	13	<1	<1	7000	<440	<1	<210	<1	<2	120	<5	31300
<1	17	120	7	16	<3	<1	9100	<420	<5	<420	<1	<1	18	<1	29800
01115050 PROVIDENCE RIVER OFF FIELDS POINT, NEAR PROVIDENCE, R.I. (LAT 41°47'15" LONG 71°22'35")															
<10	8	120	16	14	4	<1	7000	<420	<1	<200	<1	<2	160	<5	30300
<1	10	120	11	17	2	<1	7200	<400	<5	<400	<1	<1	22	<1	28900
01116630 PROVIDENCE RIVER OF CONIMICUT POINT, NEAR WARWICK, R.I. (LAT 41°43'20" LONG 71°21'00")															
<10	9	120	6	11	<1	<1	6200	<410	<1	<200	<1	<2	260	<5	29400
<1	10	130	10	24	<1	<1	8100	<430	5	<430	<1	<1	30	<1	31000
01117150 WEST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41°31'45" LONG 71°24'00")															
<10	5	120	12	12	2	<1	9200	<450	<1	<220	<1	<2	130	<5	32400
<1	30	130	5	22	<3	<1	10000	<430	<5	<430	<1	<1	16	<1	31000
01117160 EAST PASSAGE NARRAGANSETT BAY NEAR JAMESTOWN, R.I. (LAT 41°30'45" LONG 71°21'00")															
<10	19	130	2	17	<1	<1	6900	<460	<1	<220	<1	<2	120	<5	32700
<1	10	140	2	20	<3	<1	9600	<450	<5	<450	<1	<1	8	<1	32300
CONNECTICUT RIVER BASIN															
01141900 CONNECTICUT RIVER AT WILDER, VT. (LAT 43°40'04" LONG 72°18'13")															
--	2	<10	76	<1	2	<1	67	<2	<1	<1	--	--	<150	<4	105
--	2	<10	66	<1	3	<1	48	<2	<1	<1	--	--	52	<3	87
01161200 CONNECTICUT RIVER AT NORTHFIELD, MASS. (LAT 42°42'44" LONG 72°27'14")															
--	13	<10	14	<1	<2	<1	77	<2	<1	<1	--	--	<170	<4	121
--	5	<10	45	<1	1	<1	45	<2	<1	<1	--	--	<55	<3	81
01184000 CONNECTICUT RIVER AT THOMPSONVILLE, CONN. (LAT 41°59'14" LONG 72°36'21")															
--	11	<10	42	<1	8	<1	69	<2	3	2	--	--	<150	<3	--
--	13	<10	73	<1	12	<1	59	<2	5	3	--	--	<65	<3	--
HUDSON RIVER BASIN															
01333300 HOOSIC RIVER BELOW WILLIAMSTOWN, MASS. (LAT 42°44'28" LONG 73°12'47")															
--	<4	<10	80	<2	<4	<1	58	<4	<2	<2	--	--	<390	<9	280
--	1	<10	57	<1	<2	<1	26	<3	<1	<1	--	--	<110	<5	164

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
MERRIMACK RIVER BASIN						
01076500 - PEMIGEWASSET RIVER AT PLYMOUTH, N.H. (LAT 43 45 33 LONG 071 41 10)						
OCT.. 1971						
26...	9.0	1020	2	5.5	3	50
NOV.						
23...	.0	312	0	.00	1	58
JAN.. 1972						
26...	.0	680	6	11	1	63
FEB.						
23...	.0	320	0	.00	1	67
APR.						
24...	9.0	4050	16	175	1	45
MAY						
05...	5.5	15000	101	4090	5	32
24...	7.0	2870	3	23	2	38
AUG.						
28...	15.5	6160	139	2310	20	38
01089000 - SOUCOOK RIVER NEAR CONCORD, N.H. (LAT 43 14 22 LONG 071 27 44)						
OCT.. 1971						
07...	--	6.3	3	.05	0	73
NOV.						
12...	.5	19	1	.05	1	70
JAN.. 1972						
24...	.0	55	1	.15	1	92
APR.						
11...	1.5	325	1	.88	1	56
MAY						
05...	4.5	384	3	3.1	2	43
23...	16.0	147	2	.79	1	51
JULY						
12...	20.0	44	4	.48	2	68
SEP.						
22...	15.0	16	4	.17	2	70
01094000 - SOUMEGAN RIVER AT MERRIMACK, N.H. (LAT 42 51 27 LONG 071 30 24)						
OCT.. 1971						
05...	--	28	3	.23	4	113
DEC.						
15...	.0	218	3	1.8	4	96
APR.. 1972						
04...	1.5	862	0	.00	--	--
MAY						
08...	4.5	475	24	31	3	65
JUNE						
12...	18.0	318	10	8.6	1	76
JULY						
18...	25.5	110	17	5.0	2	93
01097000 - ASSABET RIVER AT MAYNARD MASS (LAT 42 25 55 LONG 071 27 01)						
OCT.. 1971						
05...	21.0	21	1	.06	1	196
NOV.						
11...	7.0	50	1	.13	2	224
JAN.. 1972						
20...	1.0	147	1	.40	1	194
FEB.						
16...	1.0	404	4	4.4	4	190
MAR.						
07...	.0	600	2	3.2	1	164
27...	3.0	806	1	2.2	3	128
MAY						
16...	16.0	520	1	1.4	2	150
JUNE						
23...	17.0	305	8	6.6	5	151
JULY						
26...	25.0	102	7	1.9	2	181

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

379

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
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MERRIMACK RIVER BASIN.--CONTINUED

01099500 - CONCORD RIVER BELOW RIVER MEADOW BROOK AT LOWELL, MASS. (LAT 42 38 12 LONG 071 18 09)

OCT.. 1971						
05...	20.0	65	6	1.1	3	319
NOV..						
08...	10.0	166	1	.45	4	264
JAN.. 1972						
04...	2.0	500	4	5.4	1	290
FEB..						
18...	2.0	894	11	27	4	227
MAR..						
27...	2.5	3180	3	26	3	158
27...	3.0	3150	2	17	7	160
MAY						
03...	1.5	990	9	24	3	210

TAUNTON RIVER BASIN

01108000 - TAUNTON RIVER AT STATE FARM NEAR BRIDGEWATER, MASS. (LAT 41 56 05 LONG 070 57 18)

DEC.. 1971						
15...	5.0	244	13	8.6	3	188
MAR.. 1972						
08...	3.5	1450	13	51	8	160
08...	3.5	1500	32	130	2	170
24...	7.0	1870	12	61	3	126
AUG.						
11...	21.0	143	9	3.5	6	153

PAWCATUCK RIVER BASIN

01117800 - WOOD RIVER NEAR ARCADIA R I (LAT 41 34 26 LONG 071 43 16)

NOV.. 1971						
24...	2.0	22	3	.19	1	49
JAN.. 1972						
12...	3.0	109	3	.88	1	44
MAR..						
08...	4.0	241	1	.65	3	39
08...	4.0	245	1	.66	2	39
16...	4.0	202	1	.55	1	40
MAY						
05...	12.0	199	3	1.6	2	38
JUNE						
14...	15.0	91	1	.25	1	40
SEP.						
13...	15.5	21	1	.06	2	40

CONNECTICUT RIVER BASIN

01135500 - PASSUMPSIC RIVER AT PASSUMPSIC VT (LAT 44 21 56 LONG 072 02 23)

OCT.. 1971						
20...	11.0	363	142	139	1	205
FEB.. 1972						
22...	.0	250	1	.67	3	196
APR.						
21...	2.0	2500	37	250	10	111
MAY						
22...	11.0	1080	148	432	1	150
JUNE						
23...	14.5	407	27	30	7	187
AUG.						
25...	--	310	22	18	10	200

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TEMPER- ATURE (DEG C)	DISE- CHARGE (CFS)	SUS- PENDE- SEDIM- ENT (MG/L)	SUS- PENDE- SEDIM- ENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
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CONNECTICUT RIVER BASIN.--CONTINUED

01137500 - AMMONOOSUC RIVER AT BETHLEHEM JUNCTION N H (LAT 44 16 08 LONG 071 37 52)

OCT.. 1971						
08...	--	69	2	.37	1	--
NOV.						
07...	5.0	81	6	1.3	2	46
DEC.						
07...	.0	80	5	1.1	1	49
JAN.. 1972						
13...	.0	66	12	2.2	2	60
FEB.						
11...	--	60	3	.49	3	48
22...	.0	74	1	.20	4	69
MAR.						
08...	.0	131	24	8.5	1	53
27...	.5	169	109	50	1	46
MAY						
22...	7.0	710	1	1.9	2	26
JUNE						
22...	18.0	112	2	.60	1	44
AUG.						
26...	18.0	75	3	.61	1	44

01144000 - WHITE RIVER AT WEST HARTFORD VT (LAT 43 42 51 LONG 072 25 07)

NOV.. 1971						
22...	5.0	460	4	5.0	1	140
DEC.						
16...	.5	1100	1	3.0	1	91
JAN.. 1972						
20...	.0	950	1	2.6	2	105
FEB.						
18...	.0	738	8	16	4	210
MAR.						
24...	3.0	4010	10	108	1	106
APR.						
28...	2.0	4080	8	88	6	120
MAY						
23...	10.0	1670	0	.00	3	130
JUNE						
09...	11.0	910	8	20	4	171
JULY						
21...	19.5	770	4	8.3	2	151
AUG.						
25...	25.5	327	3	2.6	1	205
SEP.						
22...	15.0	210	1	.57	1	214

01153500 - WILLIAMS RIVER AT BROCKWAYS MILLS VT (LAT 43 12 31 LONG 072 31 05)

OCT.. 1971						
13...	12.0	34	6	.55	2	117
DEC.						
02...	.0	51	1	.14	2	91
FEB.. 1972						
02...	--	62	6	1.0	3	100
MAR.						
07...	.0	134	7	2.5	2	92
APR.						
27...	3.0	793	0	.00	2	120
JUNE						
09...	15.0	268	1	.72	1	74
JULY						
25...	27.0	147	7	2.8	1	98
SEP.						
26...	16.0	19	2	.10	1	98

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
CONNECTICUT RIVER BASIN.--CONTINUED						
01167800 - BEAVER BROOK AT WILMINGTON VT (LAT 42 51 38 LONG 072 51 04)						
DEC.. 1971						
01...	.0	6.9	7	.13	2	55
JAN.. 1972						
19...	.0	14	4	.15	2	53
MAR.						
01...	.0	9.0	10	.24	6	134
MAY						
11...	9.0	34	0	.00	2	40
JUNE						
14...	18.0	8.4	2	.05	2	595
SEP.						
14...	15.0	2.7	7	.05	2	140
01176000 - QUABOAG RIVER AT WEST HARTFIELD, MASS. (LAT 42 10 56 LONG 072 15 51)						
NOV.. 1971						
19...	5.0	88	2	.48	1	90
JAN.. 1972						
06...	.0	227	31	14	7	92
FEB.						
10...	.0	187	5	2.5	1	93
MAR.						
16...	1.0	543	0	.00	1	73
APR.						
20...	3.0	698	2	3.8	2	60
MAY						
26...	12.0	435	9	11	3	69
JUNE						
29...	19.0	422	1	1.1	2	67
AUG.						
17...	21.0	101	2	.55	3	83
01181000 - WEST BRANCH WESTFIELD RIVER AT HUNTINGTON, MASS. (LAT 42 14 14 LONG 072 53 46)						
OCT.. 1971						
20...	13.0	62	3	.50	1	93
NOV.						
22...	3.0	98	1	.26	2	80
DEC.						
14...	1.5	309	4	3.3	1	--
FEB.. 1972						
22...	.0	121	8	2.6	5	80
MAR.						
24...	1.0	620	2	3.3	1	66
APR.						
21...	6.0	1110	8	24	2	51
MAY						
22...	14.0	369	2	2.0	1	70
JUNE						
22...	16.5	282	5	3.8	2	71
JULY						
25...	--	88	1	.24	1	78
AUG.						
24...	20.5	21	8	.45	1	96
SEP.						
22...	14.0	21	6	.35	2	100
01183500 - WESTFIELD RIVER NEAR WESTFIELD, MASS (LAT 42 06 24 LONG 072 41 58)						
NOV.. 1971						
10...	4.5	420	7	7.9	1	110
FEB.. 1972						
25...	1.5	1270	17	58	4	110
APR.						
06...	4.5	1340	10	36	4	104
MAY						
25...	16.0	1110	1	3.0	2	100
JULY						
27...	--	610	4	6.6	4	122
SEP.						
20...	17.0	168	10	4.5	1	152

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
HOUSATONIC RIVER BASIN						
01198000 - GREEN RIVER NEAR GREAT BARRINGTON, MASS. (LAT 42 11 31 LONG 073 23 28)						
OCT.. 1971						
28...	13.0	32	4	.35	1	216
DEC.						
23...	2.0	90	3	.73	1	100
FEB.. 1972						
08...	.0	76	16	3.3	2	200
APR.						
05...	--	113	1	.31	1	168
ST. LAWRENCE RIVER BASIN						
04282500 - OTTER CREEK AT MIDDLEBURY VT (LAT 44 00 47 LONG 073 10 06)						
OCT.. 1971						
05...	15.0	328	0	.00	2	198
NOV.						
10...	5.0	414	7	7.8	2	212
DEC.						
15...	2.0	1660	3	13	1	140
JAN.. 1972						
19...	.0	771	1	2.1	1	220
FEB.						
23...	.0	450	4	4.9	1	220
MAR.						
29...	1.5	2040	1	5.5	1	179
MAY						
03...	8.5	3700	36	321	10	110
JUNE						
07...	14.0	792	5	11	2	44
JULY						
12...	18.5	1550	31	130	5	194
SEP.						
27...	15.5	328	4	3.5	2	214
04288000 - MAD RIVER NEAR MORETOWN VT (LAT 44 16 42 LONG 072 44 37)						
NOV.. 1971						
03...	9.0	113	1	.31	1	80
DEC.						
08...	--	170	4	1.8	1	67
JAN.. 1972						
12...	.0	150	1	.40	1	84
FEB.						
16...	.0	128	2	.69	8	155
MAR.						
22...	2.0	210	2	1.1	1	80
APR.						
25...	4.0	846	4	9.1	1	50
MAY						
31...	14.0	101	2	.55	2	81
JULY						
18...	16.0	101	2	.55	2	70
SEP.						
19...	16.0	174	16	7.5	1	103
04292500 - LAMOILLE RIVER AT EAST GEORGIA VT (LAT 44 40 45 LONG 073 04 23)						
OCT.. 1971						
19...	--	359	4	3.9	0	128
FEB.. 1972						
02...	.0	605	4	6.5	2	120
29...	.0	281	6	4.6	9	135
JUNE						
17...	19.0	4130	76	847	16	80
AUG.						
22...	23.0	385	2	2.1	1	132
04293500 - MISSISSQUOI RIVER NEAR RICHFORD VT (LAT 44 57 30 LONG 072 41 55)						
MAR.. 1972						
01...	.5	269	26	19	3	109
30...	.0	800	10	22	1	183
JUNE						
18...	21.0	466	2	2.5	4	88

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

383

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- CHARGE (CAS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANG- NESE (MNI) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)
MERRIMACK RIVER BASIN									
01094700 - NORTH NASHUA RIVER AT NORTH VILLAGE, MASS. (LAT 42 28 47 LONG 071 41 04)									
NOV., 1971									
19...	--	7.6	330	230	13	2.0	39	5.6	1.9
01096570 - MERRIMACK RIVER ABOVE CONCORD RIVER AT LOWELL, MASS. (LAT 42 38 57 LONG 071 19 50)									
NOV., 1971									
24... 2750		5.4	130	80	6.5	1.2	12	1.6	1.1
01096910 - BOWDOIN BROOK AT EAST BOLTON, MASS. (LAT 42 27 04 LONG 071 34 19)									
NOV., 1971									
19...	.25	11	160	740	31	4.4	15	2.8	.19
01100750 - MERRIMACK RIVER AT WEST NEWBURY MASS (LAT 42 48 38 LONG 071 00 02)									
NOV., 1971									
19...	--	5.6	260	40	8.3	1.5	17	2.1	.94
BLACKSTONE RIVER BASIN									
01111230 - BLACKSTONE RIVER AT MILLVILLE, MASS. (LAT 42 01 16 LONG 071 34 04)									
NOV., 1971									
15...	--	7.4	420	230	14	2.7	39	4.4	3.2
PAWTUCKET RIVER BASIN									
01114530 - PAWTUCKET RIVER AT CRANSTON, R.I. (LAT 41 45 03 LONG 071 26 44)									
NOV., 1971									
16... 111		5.8	470	130	25	1.9	44	18	1.1
THAMES RIVER BASIN									
01123990 - QUINERBAUG RIVER NEAR DUDLEY MASS (LAT 42 01 40 LONG 071 57 37)									
NOV., 1971									
16... 90		5.9	250	290	8.8	2.3	15	2.0	.86
CONNECTICUT RIVER BASIN									
01171198 - SCARBORO BROOK AT GOLF ROAD, DWIGHT, MASS. (LAT 42 20 22 LONG 072 26 40)									
JAN., 1972									
30...	--	11	60	20	4.0	.9	3.4	.9	--
01171270 - HOP BROOK TRIBUTARY AT DWIGHT, MASS. (LAT 42 19 44 LONG 072 27 47)									
JAN., 1972									
30...	--	11	80	20	6.0	1.7	4.6	.9	--
01171290 - HOP BROOK AT SOUTH AMHERST, MASS. (LAT 42 20 31 LONG 072 29 38)									
JAN., 1972									
30...	--	12	15	20	7.0	1.9	4.6	1.0	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.—Continued

DATE	RICAR- ONATE (MG/L)	CAP- ONATE (MG/L)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED CHLOR- IDE (MG/L)	DIS- SOLVED FLUOR- IDE (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MERRIMACK RIVER BASIN									
01094700 - NORTH NASHUA RIVER AT NORTH VILLAGE, MASS. (LAT 42 28 47 LONG 071 41 04)									
NOV., 1971									
18...	26	0	46	38	.2	.150	.80	1.0	3.8
01096570 - MERRIMACK RIVER ABOVE CONCORD RIVER AT LOWELL, MASS. (LAT 42 38 57 LONG 071 19 50)									
NOV., 1971									
24...	20	0	11	17	.9	.027	.30	.76	2.2
01096910 - RIVER BROOK AT EAST RUTLAND, MASS. (LAT 42 27 04 LONG 071 34 39)									
NOV., 1971									
18...	33	0	46	42	.1	.004	.10	.15	.40
01100750 - MERRIMACK RIVER AT WEST NEWBURY MASS (LAT 42 48 38 LONG 071 33 32)									
NOV., 1971									
19...	15	0	14	24	.3	.038	.60	.84	2.2
BLACKSTONE RIVER BASIN									
01111230 - BLACKSTONE RIVER AT MILLVILLE, MASS. (LAT 42 01 16 LONG 071 34 04)									
NOV., 1971									
15...	14	0	32	61	.4	.029	1.1	1.0	5.3
PANTUCKET RIVER BASIN									
01116500 - PANTUCKET RIVER AT CRANSTON, R.I. (LAT 41 45 03 LONG 071 26 44)									
NOV., 1971									
18...	35	0	46	82	.3	.031	.40	.15	1.7
THAMES RIVER BASIN									
01123990 - OURSING RIVER NEAR DUNLEY MASS (LAT 42 31 40 LONG 071 57 37)									
NOV., 1971									
18...	14	0	15	26	.1	.012	.18	.56	1.6
CONNECTICUT RIVER BASIN									
01171198 - SCARBORO BROOK AT GULF ROAD, DWIGHT, MASS. (LAT 42 20 22 LONG 072 26 40)									
JAN., 1972									
30...	7	0	9.3	4.2	.1	--	.50	--	--
01171270 - HOP BROOK TRIBUTARY AT DWIGHT, MASS. (LAT 42 19 44 LONG 072 27 47)									
JAN., 1972									
30...	10	0	15	7.0	.1	--	.20	--	--
01171290 - HOP BROOK AT SOUTH AMHERST, MASS. (LAT 42 20 31 LONG 072 29 38)									
JAN., 1972									
30...	15	0	14	5.0	.1	--	.30	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--Continued

DATE	TOTAL DISSOLV- ED SOLIDS (PP) (MG/L)	DIS- SOLVED SOLIDS (CONC OF TUFFETS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKAL- INITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED SOLIDS (MG/L)
MERRIMACK RIVER BASIN									
01094700 - NORTH NASHUA RIVER AT NORTH VILLAGE, MASS. (LAT 42 28 47 LONG 071 41 04)									
NOV., 1971									
18...	1.2	175	41	19	71	295	6.5	7.7	6.6
01096570 - MERRIMACK RIVER ABOVE CONCORD RIVER AT LOWELL, MASS. (LAT 42 38 57 LONG 071 19 50)									
NOV., 1971									
24...	.21	64	21	5	16	121	6.7	4.8	--
01096910 - HOPKINS BROOK AT EAST RUTLAND, MASS. (LAT 42 27 04 LONG 071 34 39)									
NOV., 1971									
18...	.020	168	96	71	25	294	6.6	6.1	10.4
01100750 - MERRIMACK RIVER AT WEST NEWBURY MASS (LAT 42 48 38 LONG 071 00 02)									
NOV., 1971									
19...	.40	86	27	15	12	150	6.5	6.0	7.6
BLACKSTONE RIVER BASIN									
01111230 - BLACKSTONE RIVER AT MILLVILLE, MASS. (LAT 42 01 16 LONG 071 34 04)									
NOV., 1971									
15...	1.2	182	46	35	11	315	6.1	4.5	6.7
PAWTUCKET RIVER BASIN									
01116500 - PAWTUCKET RIVER AT CRANSTON, R.I. (LAT 41 45 03 LONG 071 26 44)									
NOV., 1971									
16...	1.2	249	70	39	31	435	7.1	7.0	4.9
THAMES RIVER BASIN									
01123990 - QUINCY RIVER NEAR DUDLEY MASS (LAT 42 01 40 LONG 071 57 37)									
NOV., 1971									
16...	.40	85	31	20	11	152	6.3	5.5	11.6
CONNECTICUT RIVER BASIN									
01171198 - SCARBORO BROOK AT GULF ROAD, DWIGHT, MASS. (LAT 42 20 22 LONG 072 26 40)									
JAN., 1972									
30...	--	--	14	8	6	52	6.6	--	--
01171270 - HOP BROOK TRIBUTARY AT DWIGHT, MASS. (LAT 42 19 44 LONG 072 27 47)									
JAN., 1972									
30...	--	--	22	14	8	78	6.6	--	--
01171290 - HOP BROOK AT SOUTH AMHERST, MASS. (LAT 42 20 31 LONG 072 29 38)									
JAN., 1972									
30...	--	--	25	13	12	82	6.6	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES OF GROUND WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
 GEOLOGIC UNIT: 1120TSH, OUTWASH DEPOSITS.

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TOTAL DEPTH OF WELL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	INSTANTANEOUS FLOW RATE (GPM)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED IRON (FE) (US/L)
HARTFORD, VT.										
HFW 60	43 39 02	072 19 03	01	1120TSH	71-12-08	76	120	400	7.9	10
				1120TSH	71-12-09	76	1620	400	7.9	10
				1120TSH	71-12-10	76	2820	400	7.7	10
HARTLAND, VT.										
HLW 57	42 32 40	072 24 30	01	1120TSH	71-11-02	71	420	463	5.8	0
				1120TSH	71-11-03	71	1680	463	6.1	0
				1120TSH	71-11-04	71	2850	463	6.0	0
NORWICH, VT.										
NFW 36	43 44 09	072 15 49	01	1120TSH	72-02-01	134	120	614	6.8	0
				1120TSH	72-02-02	134	1680	614	7.0	0
				1120TSH	72-02-03	134	2820	614	7.0	0
LOCAL IDENTIFIER	DATE OF SAMPLE	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
HARTFORD, VT.										
HFW 60	71-12-08	80	87	8.3	16	5.9	222	0	36	44
	71-12-09	50	80	7.7	16	5.5	296	0	33	40
	71-12-10	50	75	7.3	14	5.3	198	0	32	40
HARTLAND, VT.										
HLW 57	71-11-02	0	59	5.0	5.3	1.9	167	0	15	14
	71-11-03	0	60	5.0	5.8	1.9	170	0	16	16
	71-11-04	0	59	5.0	6.3	1.9	169	0	15	17
NORWICH, VT.										
NFW 36	72-02-01	0	36	3.2	2.0	1.8	137	0	20	3.0
	72-02-02	0	39	3.2	2.1	1.9	114	0	19	2.5
	72-02-03	0	38	3.3	2.1	1.9	114	0	18	2.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

387

CHEMICAL ANALYSES OF GROUND WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972.--CONTINUED

GEOLOGIC UNIT: 1120TSH, OUTWASH DEPOSITS.

LOCAL IDENTIFI- FIER	DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CaCO3 (MG/L)
HARTFORD, VT.								
HFW 60	71-12-08	.1	.30	1.3	251	69	7.1	182
	71-12-09	.1	.40	1.8	231	63	5.2	169
	71-12-10	.1	.30	1.3	217	55	4.0	162
HARTLAND, VT.								
HLW 57	71-11-02	.0	1.5	6.6	168	31	4.2	137
	71-11-03	.0	1.5	6.6	170	31	3.4	139
	71-11-04	.0	1.5	6.6	168	29	3.4	139
NORWICH, VT.								
NRW 36	72-02-01	.0	.04	.2	103	15	1.7	88
	72-02-02	.0	.06	.3	111	17	1.4	94
	72-02-03	.1	.04	.2	108	15	1.8	94

LOCAL IDENTIFI- FIER	DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
HARTFORD, VT.					
HFW 60	71-12-08	316	541	7.7	9.1
	71-12-09	293	498	7.8	9.0
	71-12-10	280	477	7.9	9.0
HARTLAND, VT.					
HLW 57	71-11-02	195	343	7.8	8.0
	71-11-03	201	351	7.9	8.0
	71-11-04	200	355	7.9	8.0
NORWICH, VT.					
NRW 36	72-02-01	126	212	8.0	6.0
	72-02-02	131	223	8.1	6.0
	72-02-03	129	222	8.0	6.0

CHEMICAL QUALITY OF PRECIPITATION

CONNECTICUT RIVER BASIN

AT AMHERST, MASS.

LOCATION.--Lat 42°22'11", long 72°31'06", Hampshire County, on the grounds of Amherst College, at Amherst, Mass.

EQUIPMENT.--The sample collector is a polyethylene funnel approximately 8 inches in diameter, which drains into a polyethylene container through an air lock created by looped tygon tubing. The opening for the collector is approximately 10 feet above ground level.

REMARKS.--Inches of precipitation measured at the point of sampling for the reported period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

PERIOD OF COLLECTION	PRECIPITATION (INCHES)	SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLO- RIDE (CL) (MG/L)
6-1-72 TO 6-30-72	9.49	.0	.1	.1	.2	.0	.39	.0	5.0	.3
7-1-72 TO 7-31-72	2.87	.0	.2	.8	1.9	.5	.04	.0	5.4	.4
8-1-72 TO 8-31-72	2.19	.0	.2	.7	.3	.1	.26	.0	5.8	.6
9-1-72 TO 9-30-72	1.58	.0	.3	.1	.3	.0	.56	.0	5.4	.5

PERIOD OF COLLECTION	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
6-1-72 TO 6-30-72	.0	.50	8.0	1.0	1.0	39	4.1
7-1-72 TO 7-31-72	.0	.40	11	4.0	4.0	46	4.1
8-1-72 TO 8-31-72	.0	.50	10	3.0	3.0	50	4.1
9-1-72 TO 9-30-72	.0	.80	11	1.0	1.0	55	4.0

INDEX

	Page		Page
Aberjona River at Winchester, Mass.	72	Bradford, N.H., West Branch Warner River near	43
Accuracy of surface-water data	8	Branch River at Forestdale, R.I.	97
Acton, Mass., Nashoba Brook near	61, 286-290	Brandy Brook at Bread Loaf, Vt.	257
Acushnet River, at Acushnet, Mass.	252	Bread and Cheese Brook at Head of Westport, Mass.	252
at Leonard Street, near Acushnet, Mass.	252	Bridgewater, Mass., Taunton River near	85
Adams, Mass., Dry Brook near	216	Bristol, N.H., Smith River near	34
Hoosic River at	217	Broad Brook, at Rock Valley St., Holyoke, Mass.	259
Adamsville Brook at Adamsville, R.I.	83	near Holyoke, Mass.	256
Agawam, Mass., Connecticut River at	346-352	Brookton, Mass., Dorchester Brook near	84
Allen Brook near Shelburne Falls, Mass.	256	Brookways Mills, Vt., Williams River at	150
Amherst, Mass., Fort River near	182	Brownington Branch near Evansville, Vt.	247
Ammonoosuc River, at Bethlehem Junction, N.H.	134, 380	Browns Brook (Smelt Brook basin) at Wakefield, R.I.	255
near Bath, N.H.	135	Browns Brook (Thames River basin) near Webster, Mass.	118, 319-322
Androscoggin River, at Errol, N.H.	17	Bryant Brook at Waterbury Center, Vt.	257
near Gorham, N.H.	18	Bucks Horn Brook at Greene, R.I.	120
Androscoggin River basin, gaging-station records in	16-18	Buffumville, Mass., Little River at	117
lakes in, capacity of	17	Buffumville Lake, Mass., contents of	121
Angeline Brook near Westport Point, Mass.	252	Bull Creek tributary near Athens, Vt.	255
Arcadia, R.I., Wood River near	111	Bungay Brook near Sheldonville, Mass.	254
Arlington, Vt., Batten Kill at	215	Burlington, Vt., Lake Champlain at	244
Ashland, N.H., Squam River at	33	Buttery Brook at South Hadley Falls, Mass.	259
Ashuelot River, at Hinsdale, N.H.	163	Buttonwood Brook near South Dartmouth, Mass.	252
below Surry Mountain Dam, near Keene, N.H.	160	Byfield, Mass., Parker River at	68
near Gilem, N.H.	159		
South Branch, at Webb, near Marlborough, N.H.	162, 325-326		
Anebumskit Brook, at Jefferson, Mass.	250	Cadwell Creek, near Belchertown, Mass.	192
near Holden, Mass.	250	near Pelham, Mass.	191
Assabet River at Maynard, Mass.	250	Canton, Mass., East Branch Neponset River at	78
Athol, Mass., East Branch Tully River near	60, 378	Carolina, R.I., Meadow Brook near	110
Lake Rohunta Outlet near	169	Carr Pond, R.I., diversion from	105
Aucoot Creek near Marion, Mass.	251	Carr River near Naoseneck, R.I.	104
Ayers Brook at Randolph, Vt.	141	Caruth Brook near Paxton, Mass.	256
		Cataoonamug Brook at Shirley, Mass.	250
Bailey Brook at East Hardwick, Vt.	257	Center Rutland, Vt., Otter Creek at	225
Bachelor Brook at South Hadley, Mass.	259	Center Strafford, N.H., Mohawk Brook near	25
Baker River near Rumney, N.H.	31	Centerdale, R.I., Woonasquatucket River at	101
Ball Mountain Reservoir, Vt., contents of	207, 208	Cfs-day, definition of	2
Barre Falls Reservoir, Mass., contents of	207, 208	Charlemont, Mass., Deerfield River at	176
Barre, Mass., Moose Brook near	187, 329-332	Charles River, at Charles River Village, Mass.	73
Ware River near	185	at Waltham, Mass.	76
Bassett Brook near Northampton, Mass.	184	at Wellesley, Mass.	75
Bath, N.H., Ammonoosuc River near	135	Charles River basin, crest-stage partial-record station in	253
Batten Kill at Arlington, Vt.	215	gaging-station records in	73-76
Bear Brook near Coventry, R.I.	254	Charles River Village, Mass., Charles River at	73
Beards Brook near Hillsboro, N.H.	253	Chase Brook, near Hudson Center, N.H.	249
Beaver Brook (tributary to Ashuelot River) at Keene, N.H.	258	near Litchfield, N.H.	249
Beaver Brook (tributary to Charles River) at Belmont, Mass.	253	Chemical oxygen demand, definition of	2
Beaver Brook (tributary to Lemon Fair River) at		Chepachet River at Chepachet, R.I.	96
Cornwall, Vt.	257	Chicopee River at Indian Orchard, Mass.	196
Beaver Brook (tributary to South Branch Deerfield River) at		Chicopee River basin, diversions from,	
Wilmington, Vt.	174-175, 381	above Indian Orchard, Mass.	196
Becket Center, Mass., Walker Brook near	200, 338-342	to Wachusett Reservoir, Mass.	204
Belchertown, Mass., Cadwell Creek near	192	Chittenden Reservoir, Vt., contents of	224
Bethlehem Junction, N.H., Ammonoosuc River at	134	Churchill Brook at Pittsfield, Mass.	256
Big Brook near Pittsburg, N.H.	122	Cleveland Brook Reservoir, Mass., diversion from	209
Biochemical oxygen demand, definition of	2	Clinton, Mass., South Branch Nashua River at	55
Birch Hill Reservoir, Mass., contents of	207, 208	Clyde River at Newport, Vt.	248
Black Brook at Averill, Vt.	255	Cobble Mountain Reservoir, Mass., contents of	207, 208
Black River (Connecticut River basin) at		Cobbler Brook near Merrimac, Mass.	253
North Springfield, Vt.	149	Cold Brook (tributary to Bearcamp River) at	
Black River (St. Lawrence River basin) at Coventry, Vt.	246	South Tamworth, N.H.	22
Blackstone River, at Millville, Mass.	301-307,	Cold Brook (tributary to Rhode Island Sound) near	
	383, 384, 385	Adamsville, R.I.	254
at Northbridge, Mass.	93	Cold Hill Brook near Lyndon, Vt.	255
at Woonsocket, R.I.	98	Cold River at Drewsville, N.H.	153
tributary at Woonsocket, R.I.	99	Coldbrook, Mass., Ware River at	186
tributary No. 2 at Berkeley, R.I.	254	Cole River near Swansea, Mass.	252
Blackstone River basin, crest-stage partial-record stations in	254	Coliform organisms, definition of	2
gaging-station records in	91-99	Collection of surface-water data	6-9
water-quality analyses at miscellaneous site in	383, 384, 385	water-quality data	9-11
water-quality station in	301-307	Color, definition of	2
Blackwater Reservoir, N.H., contents of	67	Colrain, Mass., Green River near	180
Blackwater River near Webster, N.H.	45	Coltsville, Mass., East Branch Housatonic River at	209
Borden Brook Reservoir, Mass., contents of	207, 208	Cornford Reservoir, N.H., contents of	207, 208
Boulder Brook, at East Bolton, Mass.	58-59,	Computation of surface-water data	6-9
	281-285, 383, 384, 385	Conant Brook Reservoir, Mass., contents of	207, 208
near East Bolton, Mass.	276-280	Concord, N.H., Saucook River near	47
		Concord River below River Meadow Brook, at Lowell, Mass.	63, 379

Concord, Vt., Kirby Brook at.....	Page 131	Effingham Falls, N.H., Ossipee River at.....	Page 23
Connecticut River, at Agawam, Mass.....	346-352	Ellis River near Jackson, N.H.....	19
at First Connecticut Lake, near Pittsburg, N.H.....	123	Errol, N.H., Androscoggin River at.....	17
at Montague City, Mass.....	181	Erving, Mass., Millers River at.....	172
at North Stratford, N.H.....	126	Essex Junction, Vt., Winooski River near.....	237
at North Walpole, N.H.....	152	Etna, N.H., Mink Brook near.....	140
at Northfield, Mass.....	327-328	Evansville, Vt., Brownington Branch near.....	247
368, 370, 371, 376, 377		Everett Lake, N.H., contents of.....	67
at Thompsonville, Conn.....	204	Exeter, N.H., Dudley Brook near.....	28
353-354, 368, 370, 371, 376, 377			
at Turners Falls, Mass.....	173	Fair Haven, Vt., Paultney River below.....	222
at Vernon, Vt.....	158	Fall Brook at Leominster, Mass.....	249
at Wells River, Vt.....	136	Fall River below Otis Reservoir, near Otis, Mass.....	205
at West Springfield, Mass.....	336-337	Falls River at Bernardston, Mass.....	258
at White River Junction, Vt.....	143	Falulah Brook at Fitchburg, Mass.....	249
at Wilder, Vt.....	323-324	Farmington River, West Branch, near New Boston, Mass.....	206
368, 370, 371, 376, 377		First Connecticut Lake, N.H., contents of.....	207, 208
below Indian Stream, near Pittsburg, N.H.....	124	Fish Brook near Gilbertville, Mass.....	256
near Dalton, N.H.....	128	Flag Brook near Westminster, Mass.....	249
tributary near Vernon, Vt.....	256	Flat River Reservoir, R.I., contents of.....	105
Connecticut River basin, crest-stage partial-record		Flood Brook near Londonderry, Vt.....	155
stations in.....	255-256	Forestdale, R.I., Branch River at.....	97
discharge measurements at miscellaneous sites in.....	258-259	Fort River near Amherst, Mass.....	182
gaging-station records in.....	122-206	Fourmile Brook near Northfield, Mass.....	258
reservoirs in.....	207-208	Framingham Center, Mass., Sudbury River at.....	62
water-quality analyses, at miscellaneous sites in.....	383, 384, 385	Franklin Falls Reservoir, N.H., contents of.....	67
at partial-record stations in.....	368,	Franklin Junction, N.H., Merrimack River at.....	38
370, 371, 376, 377, 379-381		French River, at Webster, Mass.....	119
water-quality stations in.....	323-354	below Hodges Village Dam, at Hodges Village, Mass.....	116
Contents, definition of.....	2	Frenchtown Brook near Davisville, R.I.....	255
Contoocook River, at Penacook, N.H.....	46	Fuller Brook near Peru, Mass.....	256
at Peterborough, N.H.....	39	Furnace Brook near Marshfield, Mass.....	254
below Hopkinton Dam, at West Hopkinton, N.H.....	42	Furnace Hill Brook at Cranston, R.I.....	106
near Henniker, N.H.....	41		
Control, definition of.....	2	Gage height, definition of.....	3
Conway, Mass., South River near.....	178	Gaging station, definition of.....	3
Conway, N.H., Saco River near.....	21	Gates Brook at West Boylston, Mass.....	250
Cooperation, record of.....	1-2	Georgia Plains, Vt., Stone Bridge Brook near.....	241
Couch Brook near North Bernardston, Mass.....	258	Gibbs Crossing, Mass., Ware River at.....	188
Coventry, Vt., Black River at.....	246	Gihon River tributary near Johnson, Vt.....	257
Cranston, R.I., Furnace Hill Brook at.....	106	Gilsum, N.H., Ashuelot River near.....	159
Powhuxet River at.....	107, 308-311	Glen Rock Brook tributary at Uxuepaug, R.I.....	255
Crystal Lake, N.H., capacity of.....	207	Goffstown, N.H., Piscataquog River near.....	50
Cubic feet per second per square mile, definition of.....	2	South Branch Piscataquog River near.....	49
Curie, definition of.....	3	Goose Pond, N.H., capacity of.....	207
		Graham, N.H., Androscoggin River near.....	18
Dalton, N.H., Connecticut River near.....	128	Gass Heights, Mass., Middle Branch Westfield River at.....	199
Data, accuracy of surface-water.....	8	Grafton Pond, N.H., capacity of.....	207
other available surface-water.....	9	Great Barrington, Mass., Housatonic River near.....	211
surface-water, collection and computation of.....	6-9	Green River (Connecticut River basin) near Calrain, Mass.....	180
water-quality, collection and examination of.....	9-11	Green River (Housatonic River basin) near.....	382
Davisville, N.H., Warner River at.....	44	Great Barrington, Mass.....	220
Dedham, Mass., Mather Brook at.....	74	Green River (Hudson River basin) at Williamstown, Mass.....	120
Deerfield River, at Charlemont, Mass.....	176	Greene, R.I., Bucks Horn Brook at.....	386, 387
near West Deerfield, Mass.....	179	Ground water, chemical analyses of, in Vermont.....	127
Definition of terms.....	2-5	Gravaton, N.H., Upper Ammonoosuc River near.....	256
Destruction Brook near South Dartmouth, Mass.....	16	Haley Pond Outlet near Otis, Mass.....	125
Diamond River near Wentworth Location, N.H.....	89	Halls Stream near East Hereford, Quebec.....	80
Dighton, Mass., Segreganset River near.....	232	Hanover, Mass., Indian Head River at.....	254
Discharge, definition of.....	3	Hardig Brook near West Warwick, R.I.....	3
Dog River at Northfield Falls, Vt.....	3	Hardness, definition of.....	190
Dorchester Brook near Brockton, Mass.....	84	Hardwick, Mass., East Branch Swift River near.....	207, 208
Drainage area, definition of.....	153	Harriman Reservoir, Vt., contents of.....	95
Drewsville, N.H., Cold River at.....	254	Harrisville, R.I., Nipmuc River near.....	66
Dry Arm Brook near Wallum Lake, R.I.....	258	Haverhill, Mass., East Meadow River near.....	253
Dry Brook (Connecticut River basin) at Gill, Mass.....	216	Hayward Brook at Wayland, Mass.....	253
Dry Brook (Hudson River basin) near Adams, Mass.....	28	Heath Hen Meadow Brook at Stow, Mass.....	41
Dudley Brook near Exeter, N.H.....	312-313	Henniker, N.H., Contoocook River near.....	82
Dudley, Mass., Quinebaug River near.....	26	Herrington River at North Harwich, Mass.....	163
Durham, N.H., Oyster River near.....	230	Hinsdale, N.H., Ashuelot River at.....	116
	228	Hodges Village, Mass., French River at.....	121
East Barre Dentation Reservoir, Vt., contents of.....	228	Hodges Village Reservoir, Mass., contents of.....	254
East Barre, Vt., Jail Branch at.....	58-59	Holloway Brook near Myricks, Mass.....	217
East Bolton, Mass., Boulder Brook at.....	281-285	Hosic River, at Adams, Mass.....	355-362
Boulder Brook near.....	276-280	below Williamstown, Mass.....	369, 372, 373, 376, 377
East Brimfield Lake, Mass., contents of.....	121	diversion from, above Adams, Mass.....	217
East Creek at Rutland, Vt.....	224	near North Pownal, Vt.....	363
East Creek basin, diversion from, above Rutland, Vt.....	224	near Williamstown, Mass.....	369, 372, 373
East Georgia, Vt., Lamoille River at.....	240	North Branch, at North Adams, Mass.....	218
East Greenwich, R.I., Potowomut River near.....	108	Hop Brook (tributary to Fort River) at.....	258
East Haven, Vt., East Branch Passumpsic River near.....	129	South Amherst, Mass.....	383, 384, 385
East Hereford, Quebec, Halls Stream near.....	125	near Dwight, Mass.....	258
East Meadow River near Haverhill, Mass.....	66	tributary at Dwight, Mass.....	258
East Orange Branch at East Orange, Vt.....	138	Hop Brook (tributary to Quabbin Reservoir) near.....	189, 333-335
East Pepperell, Mass., Nashua River at.....	57	New Salem, Mass.....	
East Weare, N.H., Piscataquog River near.....	48		
Easter Brook near North Leominster, Mass.....	253		
Eden, Vt., Stony Brook near.....	239		

Hape Valley, R.I., Wood River at	Page 112	Lakes and reservoirs--Continued	Page
Hopkinton Lake, N.H., contents of	67	First Connecticut Lake, N.H.	207, 208
Houghton Brook near Oakdale, Mass.	253	Flat River Reservoir, R.I.	160
Housatonic River, East Branch, at Coltsville, Mass.	209	Francis Lake, N.H.	207, 208
near Great Barrington, Mass.	211	Franklin Falls Reservoir, N.H.	67
tributary at Risingdale, Mass.	256	Goose Pond, N.H., capacity of	207
tributary No. 2 at Lee, Mass.	256	Grafton Pond, N.H., capacity of	207, 208
Housatonic River basin, crest-stage partial-record stations in	209-214	Harriman Reservoir, Vt.	121
gaging-station records in	209-214	Hodges Village Reservoir, Mass.	67
water-quality analyses, at partial-record station in	382	Hopkinton Lake, N.H.	207, 208
Hubbard Brook at Sheffield, Mass.	214	Knightsville Reservoir, Mass.	207, 208
Hudson River basin, crest-stage partial-record stations in	256-257	Littleville Lake, Mass.	207, 208
gaging-station records in	215-221	Ludlow Reservoir, Mass.	67
water-quality analyses at partial-record stations in	369	MacDowell Reservoir, N.H.	207, 208
water-quality stations in	372, 373, 376, 377	Mascoma Lake, N.H., capacity of	67
Huntington, Mass., West Branch Westfield River at	355-363	Mascoma Lake, N.H.	67
Hydrologic conditions	11	Mascoma River, at Mascoma, N.H.	207
graph of	12	Mascoma River, at West Townsend, Mass.	207, 208
Indian Head River at Hanover, Mass.	80	Mascoma River, at West Townsend, Mass.	207, 208
Indian Orchard, Mass., Chicopee River at	196	Mascoma River, at West Townsend, Mass.	207, 208
International Hydrological Decade River Stations, description of	5	Mascoma River, at West Townsend, Mass.	207, 208
Introduction	1	Mascoma River, at West Townsend, Mass.	207, 208
Ipswich, Mass., Ipswich River near	71	Mascoma River, at West Townsend, Mass.	207, 208
diversions from, above Ipswich, Mass.	70	Mascoma River, at West Townsend, Mass.	207, 208
above South Middleton, Mass.	71	Mascoma River, at West Townsend, Mass.	207, 208
near Ipswich, Mass.	70	Mascoma River, at West Townsend, Mass.	207, 208
Ipswich River basin, gaging-station records in	69-71	Mascoma River, at West Townsend, Mass.	207, 208
Jackson, N.H., Ellis River near	19	Mascoma River, at West Townsend, Mass.	207, 208
Jackstraw Brook, at Hopkinton Road, Westborough, Mass.	253	Mascoma River, at West Townsend, Mass.	207, 208
Jail Branch at East Barre, Vt.	228	Mascoma River, at West Townsend, Mass.	207, 208
Jamaica, Vt., West River at	154	Mascoma River, at West Townsend, Mass.	207, 208
James Brook near Ayer, Mass.	251	Mascoma River, at West Townsend, Mass.	207, 208
Jones Brook tributary near East Barre, Vt.	255	Mascoma River, at West Townsend, Mass.	207, 208
Johnson, Vt., Lamaille River at	238	Mascoma River, at West Townsend, Mass.	207, 208
Jones River at Kingston, Mass.	81	Mascoma River, at West Townsend, Mass.	207, 208
Keene Brook at Grafton, Vt.	255	Mascoma River, at West Townsend, Mass.	207, 208
Keene, N.H., Ashuelot River near	160	Mascoma River, at West Townsend, Mass.	207, 208
Otter Brook near	161	Mascoma River, at West Townsend, Mass.	207, 208
Kent Brook near Sherburne, Vt.	146	Mascoma River, at West Townsend, Mass.	207, 208
Kettle Brook, at Worcester, Mass.	91	Mascoma River, at West Townsend, Mass.	207, 208
diversion from, above Worcester, Mass.	91	Mascoma River, at West Townsend, Mass.	207, 208
Kingston, Mass., Jones River at	81	Mascoma River, at West Townsend, Mass.	207, 208
Kirby Brook (Connecticut River basin) at Concord, Vt.	131	Mascoma River, at West Townsend, Mass.	207, 208
Kirby Brook (East Branch Westport River basin) near Head of Westport, Mass.	252, 254	Mascoma River, at West Townsend, Mass.	207, 208
Knightsville, Mass., Sykes Brook at	197	Mascoma River, at West Townsend, Mass.	207, 208
Knightsville Reservoir, Mass., contents of	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Lake Champlain, at Burlington, Vt.	244	Mascoma River, at West Townsend, Mass.	207, 208
near Crown Point, N.Y.	366, 367, 369, 372, 373, 374, 375	Mascoma River, at West Townsend, Mass.	207, 208
near Ticonderoga, N.Y.	366, 367, 369, 372, 373, 374, 375	Mascoma River, at West Townsend, Mass.	207, 208
near Whitehall, N.Y.	366, 367, 369, 372, 373, 374, 375	Mascoma River, at West Townsend, Mass.	207, 208
Lake Chaubunagungamaug, Mass., capacity of	119	Mascoma River, at West Townsend, Mass.	207, 208
Lake Francis, N.H., contents of	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Lake Memphremagog at Newport, Vt.	245	Mascoma River, at West Townsend, Mass.	207, 208
Lake Rohunka Outlet near Athol, Mass.	170	Mascoma River, at West Townsend, Mass.	207, 208
Lake Wentworth, N.H., contents of	67	Mascoma River, at West Townsend, Mass.	207, 208
Lake Winnepesaukee at Weirs Beach, N.H.	35	Mascoma River, at West Townsend, Mass.	207, 208
Lake Winnepesaukee Outlet at Lakeport, N.H.	36	Mascoma River, at West Townsend, Mass.	207, 208
Lakeport, N.H., Lake Winnepesaukee Outlet at	36	Mascoma River, at West Townsend, Mass.	207, 208
Lakes and reservoirs:		Mascoma River, at West Townsend, Mass.	207, 208
Ball Mountain Reservoir, Vt.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Barre Falls Reservoir, Mass.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Birch Hill Reservoir, Mass.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Blackwater Reservoir, N.H.	67	Mascoma River, at West Townsend, Mass.	207, 208
Borden Brook Reservoir, Mass.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Buffumville Lake, Mass.	121	Mascoma River, at West Townsend, Mass.	207, 208
Carr Pond, R.I., diversion from	105	Mascoma River, at West Townsend, Mass.	207, 208
Champlain Lake, N.Y.-Vt.	244	Mascoma River, at West Townsend, Mass.	207, 208
Chaubunagungamaug Lake, Mass., capacity of	119	Mascoma River, at West Townsend, Mass.	207, 208
Chittenden Reservoir, Vt.	224	Mascoma River, at West Townsend, Mass.	207, 208
Cleveland Brook Reservoir, Mass., diversion from	209	Mascoma River, at West Townsend, Mass.	207, 208
Cobble Mountain Reservoir, Mass.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Comerford Reservoir, N.H.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Conant Brook Reservoir, Mass.	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Crystal Lake, N.H., capacity of	207	Mascoma River, at West Townsend, Mass.	207, 208
East Barre Detention Reservoir, Vt.	230	Mascoma River, at West Townsend, Mass.	207, 208
East Brimfield Lake, Mass.	121	Mascoma River, at West Townsend, Mass.	207, 208
Everett Lake, N.H.	67	Mascoma River, at West Townsend, Mass.	207, 208
MacDowell Reservoir, N.H., contents of	67	Mascoma River, at West Townsend, Mass.	207, 208
Mad River near Moretown, Vt.	234, 382	Mascoma River, at West Townsend, Mass.	207, 208
Malden Brook at Oakdale, Mass.	250	Mascoma River, at West Townsend, Mass.	207, 208
Manchester, N.H., Merrimack River below	51	Mascoma River, at West Townsend, Mass.	207, 208
Manhan River, at Easthampton, Mass.	259	Mascoma River, at West Townsend, Mass.	207, 208
Maple Meadow Brook, at Wilmington, Mass.	69	Mascoma River, at West Townsend, Mass.	207, 208
Marlborough, N.H., South Branch Ashuelot River near	325-326	Mascoma River, at West Townsend, Mass.	207, 208
Marsh Brook at Lenox, Mass.	210	Mascoma River, at West Townsend, Mass.	207, 208
Mascoma Lake, N.H., capacity of	207	Mascoma River, at West Townsend, Mass.	207, 208
Mascoma River, at Mascoma, N.H.	145	Mascoma River, at West Townsend, Mass.	207, 208
Mascoma River basin, lakes and ponds in, contents of	207, 208	Mascoma River, at West Townsend, Mass.	207, 208
Mason Brook near West Townsend, Mass.	250	Mascoma River, at West Townsend, Mass.	207, 208
Massachusetts Lake, N.H., contents of	67	Mascoma River, at West Townsend, Mass.	207, 208
Mattapoisett River, at Rousesville Road, near	251	Mascoma River, at West Townsend, Mass.	207, 208
at Tinkham Lake, near Mattapoisett, Mass.	251	Mascoma River, at West Townsend, Mass.	207, 208
near Mattapoisett, Mass.	251	Mascoma River, at West Townsend, Mass.	207, 208

	Page		Page
Mattapoisett River basin, low-flow partial-record stations in.....	251	Nashoba Brook near Acton, Mass.....	61, 286-290
Maynard, Mass., Assabet River at.....	60	Nashua River, at East Pepperell, Mass.....	57
McQuade Brook near Bedford, N.H.....	253	South Branch, at Clinton, Mass.....	55
Meadow Brook (Pawcatuck River basin) near Caroline, R.I.....	110	Nashua River basin, diversion from.....	98
Meadow Brook tributary (Taunton River basin) near Whitman, Mass.....	254	Naticook Brook, near Merrimack, N.H.....	249
Merrimack, N.H., Souhegan River at.....	53	near South Merrimack, N.H.....	249
Merrimack River, above Concord River, at Lowell, Mass.....	272-275	Neponset River, at Norwood, Mass.....	77
above Lowell, Mass.....	383, 384, 385	East Branch, at Canton, Mass.....	78
at Franklin Junction, N.H.....	368, 370, 371, 376, 377	Neponset River basin, crest-stage partial-record stations in.....	254
at West Newbury, Mass.....	294-300	gaging-station records in.....	77-78
below Concord River, at Lowell, Mass.....	383, 384, 385	Neshoba River at Brandon, Vt.....	257
near Goffs Falls, below Manchester, N.H.....	64, 291-293	Networks, special.....	5
tributary at Hudson Center, N.H.....	51	New Boston, Mass., West Branch Farmington River near.....	206
Merrimack River basin, crest-stage partial-record stations in.....	253	New Salem, Mass., Hop Brook near.....	189, 333-335
gaging-station records in.....	29-66	Newfane, Vt., West River at.....	157
low-flow partial-record stations in.....	249-251	Newfound Lake, N.H., contents of.....	67
reservoirs in.....	67	Newmarket, N.H., Lamprey River near.....	27
water-quality analyses, at miscellaneous sites in.....	383, 384, 385	Newport, Vt., Clyde River at.....	248
at partial-record stations in.....	364	Lake Memphremagog at.....	245
water-quality stations in.....	263-300	Nipmuc River near Harrisville, R.I.....	95
Merrymeeting Lake, N.H., contents of.....	67	Nisitisit River, at Pepperell, Mass.....	251
Metacomb Brook at East Providence, R.I.....	254	near Hollis, N.H.....	251
Methylene blue active substance, definition of.....	3	Nonacoicus Brook near Ayer, Mass.....	250
Mettawee River, tributary near Pawlet, Vt.....	223	Noanseneck, R.I., Co. River near.....	104
tributary No. 2 at East Rupert, Vt.....	257	Noanseneck River at.....	103
Micrograms per liter, definition of.....	3	Noanseneck River at Noanseneck, R.I.....	103
Middlebury, Vt., Otter Creek at.....	226	North Adams, Mass., North Branch Hoosic River at.....	218
Mill Brook (Connecticut River basin) at Plainfield, Mass.....	256	North Bennington, Vt., Wallomsac River near.....	221
Mill Brook (Neponset river basin) at Westwood, Mass.....	254	North Conway, N.H., Lucy Brook near.....	20
Mill River (tributary to Connecticut River in Franklin County) near South Deerfield, Mass.....	256	North Dighton, Mass., Threemile River at.....	88
Mill River (tributary to Connecticut River in Hampden County), at Springfield, Mass.....	259	North Grafton, Mass., Quinsigamond River at.....	92
North Branch, near Wilbraham, Mass.....	259	North Hartland Reservoir, Vt., contents of.....	207, 208
County), at Northampton, Mass.....	183	North Hartland, Vt., Ottaquechee River at.....	147
East Branch, at Bullard St., Williamsburg, Mass.....	258	North Harwich, Mass., Herring River at.....	82
tributary at Williamsburg, Mass.....	258	North Nashua River, at North Village, Mass.....	263-269
tributary at Northampton, Mass.....	259	near Leominster, Mass.....	383, 384, 385
Millers Brook at Northfield, Mass.....	256	North Pawnee, Vt., Hoosic River near.....	54
Millers River, at Erving, Mass.....	172	North River basin, gaging-station record in.....	363
at South Royalston, Mass.....	168	North River (Connecticut River basin) at Shattuckville, Mass.....	80
near Winchendon, Mass.....	165	North Scituate, R.I., Masquithawk Brook near.....	177
Milligrams per liter, definition of.....	3	North Springfield Reservoir, Vt., contents of.....	102
Millville, Mass., Blackstone River at.....	301-307	North Springfield, Vt., Black River at.....	207, 208
Milton, N.H., Salmon Falls River at.....	24	North Stratford, N.H., Connecticut River at.....	149
Mink Brook near Etna, N.H.....	140	North Troy, Vt., Missisquoi River near.....	126
Missisquoi River, near North Troy, Vt.....	242	North Village, Mass., North Nashua River at.....	242
near Richford, Vt.....	243, 382	North Walpole, N.H., Connecticut River at.....	263-269
tributary at Sheldon Junction, Vt.....	257	Northampton, Mass., Bassett Brook near.....	184
Mohawk Brook near Center Stratford, N.H.....	25	Mill River at.....	183
Mollys Falls Reservoir and Peacham Pond, Vt., contents of.....	231	Northbridge, Mass., Blackstone River at.....	93
Monasac Brook at Leominster, Mass.....	249	Northfield Falls, Vt., Dog River at.....	232
Montague City, Mass., Connecticut River at.....	181	Northfield, Mass., Connecticut River at.....	327-328
Montpelier, Vt., reservoirs in Winooski River basin above.....	230	Norton, Mass., Wading River near.....	77
Sony Brook near.....	233	Norwood, Mass., Neponset River at.....	87
Winooski River at.....	231	Nubanusit Brook near Peterborough, N.H.....	40
Moon Brook at Rutland, Vt.....	207, 208	Old Maids Brook near Nashua, N.H.....	251
Moore Reservoir, N.H.....	187, 329-332	Old Swamp River near South Weymouth, Mass.....	79
Moose Brook near Barre, Mass.....	132	Ompompanoosuc River, at Union Village, Vt.....	139
Moose River, at St. Johnsbury, Vt.....	130	West Branch tributary at South Stratford, Vt.....	255
at Victory, Vt.....	130	Order of listing stations.....	5
Moretown, Vt., Mad River near.....	234	Ossipee River at Effingham Falls, N.H.....	23
Moshasuck River at Providence, R.I.....	100	Ossipee River basin, capacity of lakes and ponds in.....	23
Mosquitohawk Brook near North Scituate, R.I.....	102	Other data available.....	9
Moss Brook at Wandell Depot, Mass.....	171	Otis, Mass., Fall River near.....	205
Mother Brook at Dedham, Mass.....	74	Otis Reservoir, Mass., contents of.....	207, 208
Mount Hope Bay near Bristol, R.I.....	364	Ottaquechee River, at North Hartland, Vt.....	147
Mountain Brook near Warwick, Mass.....	365, 368, 370, 371, 374, 375, 376, 377	tributary near Quechee, Vt.....	255
Mowry Paine Brook near Chepachet, R.I.....	254	Otter Brook below Otter Brook Dam, near Keene, N.H.....	161
Mud Pond tributary near Dublin, N.H.....	253	Otter Brook Lake, N.H., contents of.....	207, 208
Muddy Brook near Granby, Mass.....	259	Otter Creek, at Center Rutland, Vt.....	225
Mulpus Brook, near Lunenburg, Mass.....	250	at Middlebury, Vt.....	226, 382
near Shirley, Mass.....	250	Otter River at Otter River, Mass.....	167
Musquash Brook tributary near Hudson, N.H.....	251	Oyster River near Durham, N.H.....	26
Mystic River basin, gaging-station record in.....	72	Palmer River, East Branch, at Rehoboth, Mass.....	252
Narragansett Bay, East Passage, near Jamestown, R.I.....	364	near Rehoboth, Mass.....	252
water-quality analyses at partial-record stations in.....	364	West Branch, near Rehoboth, Mass.....	90
West Passage, near Jamestown, R.I.....	364	Palmer River basin, gaging station record in.....	90
365, 368, 370, 371, 374, 375, 376, 377		low-flow partial-record stations in.....	252
		Paran Creek near South Shaftsbury, Vt.....	257
		Parker River, at Byfield, Mass.....	68
		tributary near Georgetown, Mass.....	253
		Parker River basin, crest-stage partial-record station in.....	253
		gaging-station record in.....	68
		Partial-record station, definition of.....	4
		Paskamanset River near South Dartmouth, Mass.....	252
		Passumpsic River, at Passumpsic, Vt.....	133, 379
		East Branch, near East Haven, Vt.....	129

Paul Stream tributary near Brunswick, Vt.	Page 255	Runnins River at Seekonk, Mass.	Page 252, 254
Pawcatuck River, at Westerly, R.I.	113	Runoff in inches, definition of	4
at Wood River Junction, R.I.	109	Rutland, Vt., East Creek at	224
Pawcatuck River basin, crest-stage partial-record stations in	255	Sacketts Brook near Putney, Vt.	154
gaging-station records in	109-113	Saco River basin, crest-stage partial-record station in	253
water-quality analyses at partial-record station in	379	gaging-station records in	19-23
Pawlet, Vt., Mattawee River tributary near	223	Saco River, East Branch, near Lower Bartlett, N.H.	253
Pawtuxet River, at Cranston, R.I.	107	near Conway, N.H.	21
308-311, 383, 384, 385		St. Johnsbury, Vt., Moose River at	132
South Branch, at Washington, R.I.	105	St. Lawrence River basin, crest-stage partial-record stations in	257
Pawtuxet River basin, crest-stage partial-record stations in	254	gaging-station records in	222-248
gaging-station records in	102-107	water-quality analyses at partial-record stations in	366, 367, 369, 372, 373, 374, 375, 382
water-quality analyses at miscellaneous site in	383, 384, 385	Salmon Falls River at Milton, N.H.	24
water-quality station in	308-311	Salmon Falls River basin, contents in lakes and ponds in	24
Peacham Pond and Mollys Falls Reservoir, Vt., contents of	231	Saxe Brook near Highgate Springs, Vt.	257
Pearl Hill Brook near West Townsend, Mass.	250	Saxtons River at Saxtons River, Vt.	151
Pecassic Brook near Springfield, Mass.	259	Scarboro Brook at Dwight, Mass.	256
Pelham, Mass., Cadwell Creek near	191	at Gulf Road, Dwight, Mass.	258, 383, 384, 385
Pemigewasset River, at Plymouth, N.H.	12, 32, 379	Schenob Brook near Sheffield, Mass.	212
at Woodstock, N.H.	29	Scituate Reservoir, R.I., contents of and diversion from	107
364, 365, 368, 370, 371, 374, 375, 376, 377		Second Connecticut Lake, N.H., contents of	207, 208
East Branch, near Lincoln, N.H.	253	Sediment, collection of data	11
Penacook, N.H., Contoocook River at	46	definition of	4
Perry Healy Brook near Bradford, R.I.	255	Segreganset River near Dighton, Mass.	89
Peterborough, N.H., Contoocook River at	39	Selected references	13
Nubanusit Brook near	40	Sevenmile River near Spencer, Mass.	194
pH, definition of	4	Seymour Brook tributary at Granville, Mass.	256
Pherrins River tributary near Island Pond, Vt.	257	Shattuckville, Mass., North River at	177
Picacurie, definition of	4	Showshen River near Wilmington, Mass.	65
Piscataqua River basin, gaging-station records in	24-28	Sheffield, Mass., Hubbard Brook at	214
Piscataquog River, below Everett Dam, near		Schenob Brook near	212
East Weare, N.H.	48	Willard Brook near	213
near Goffstown, N.H.	50	Sherburne, Vt., Kent Brook near	146
South Branch, near Goffstown, N.H.	49	Shingle Island River, at Hixville Pond, near	
Pittsburg, N.H., Big Brook near	122	North Dartmouth, Mass.	252
Connecticut River near	123, 124	near North Dartmouth, Mass.	252
Plantingfield Brook at Norwood, Mass.	254	Shippie Brook tributary at North Foster, R.I.	254
Pleasant Brook near Barre, Mass.	256	Sippican River near Marion, Mass.	251
Plymouth, N.H., Pemigewasset River at	32	Slocums River basin, low-flow partial-record stations in	252
Pocasset River near North Scituate, R.I.	254	Smelt Brook basin, crest-stage partial-record station in	255
Porcupine Brook, at Pelham Road, near		Smith River near Bristol, N.H.	34
Salem Depot, N.H.	251	Snows Brook near Bridgewater, Mass.	254
at Highway 38, near Salem Depot, N.H.	251	Solute, definition of	4
Potowomut River, diversions from, above East Greenwich, R.I.	108	Solute, collection of data	10
near East Greenwich, R.I.	108	Somerset Reservoir, Vt., contents of	207, 208
Potowomut River basin, crest-stage partial-record station in	255	Sonny Brook near Montpelier, Vt.	233
gaging-station record in	108	Soucook River near Concord, N.H.	47, 378
Paultney River, below Fair Haven, Vt.	222	Souhegan River at Merrimack, N.H.	53, 378
tributary at East Paultney, Vt.	257	South Middleton, Mass., Ipswich River at	70
Precipitation, chemical quality of, at Amherst, Mass.	388	South River (tributary to Deerfield River) near	
Priest Brook near Winchendon, Mass.	166	Conway, Mass.	178
Providence, R.I., Mashassuck River at	100	South River basin, crest-stage partial-record station in	254
Providence River, off Conimicut Point, near Warwick, R.I.	364, 365, 368, 370, 371, 374, 375, 376, 377	South Royalston, Mass., Millers River at	168
off Fields Point, near Providence, R.I.	364, 365, 368, 370, 371, 374, 375, 376, 377	South Stream near Bennington, Vt.	257
Publications, surface-water	8-9	South Tamworth, N.H., Cold Brook at	22
water-quality	11	South Weymouth, Mass., Old Swamp River near	79
Putney, Vt., Sacketts Brook near	154	Southbridge, Mass., Quinebaug River near	114
Quabbin Reservoir, Mass., contents of	207, 208	Specific conductance, definition of	4
Quaboag River at West Brimfield, Mass.	195, 381	Spencer, Mass., Sevenmile River near	4
Quaker Brook near Myricks, Mass.	254	Squam River at Ashland, N.H.	194
Quality of water, explanation of data	9-11	Squannacook River, at Townsend, Mass.	251
Quimby Brook near Lyndonville, Vt.	255	near West Groton, Mass.	56
Quinapoxet River near Holden, Mass.	250	Stage-discharge relation, definition of	4
Quinebaug River, at Quinebaug, Conn.	115	Starksboro, Vt., Lewis Creek tributary at	227
below Westville Dam, near Southbridge, Mass.	114	Station number	5
near Dudley, Mass.	312-318, 383, 384, 385	Stevens Branch tributary at South Barre, Vt.	257
Quinsigamond River at North Grafton, Mass.	92	Stevens Brook near Wentworth, N.H.	30
Radiochemical program, description of	5	Still Brook near West Agawam, Mass.	259
Randolph, Vt., Ayers Brook at	141	Stillwater River, at Moores Corners, near Sterling, Mass.	250
Red Brook near North Leverett, Mass.	258	near Sterling, Mass.	250
Reedy Meadow Brook at East Pepperell, Mass.	251	Stone Bridge Brook near Georgia Plains, Vt.	241
Rahoboth, Mass., West Branch Palmer River near	90	Stony Brook (St. Lawrence River basin) near Eden, Vt.	239
Reservoirs. See Lakes and reservoirs	391	Stony Brook tributary (Merrimack River basin) near	
Richardson Brook near Lowell, Mass.	253	Temple, N.H.	52
Richford, Vt., Missisquoi River near	243	Sudbury River at Framingham Center, Mass.	62
Roaring Brook (tributary to Broad Brook) near		Sugar River at West Claremont, N.H.	148
Belchertown, Mass.	256	Sunapee Lake, N.H., contents of	207, 208
Roaring Brook (tributary to Connecticut River) at		Suncook River at North Chichester, N.H.	253
East Leverett, Mass.	258	Surface water, explanation of data	6-9
Conway, Mass.	258	Surry Mountain Lake, N.H., contents of	207, 208
Roberts Meadow Brook near Westhampton, Mass.	259	Swift Brook near Mattapoisett, Mass.	251
Robinson Brook near Pepprell, Mass.	251	Swift River, at West Ware, Mass.	193
Rocky Run near Rahoboth, Mass.	252	East Branch, near Hardwick, Mass.	190
Runney, N.H., Baker River near	31	Middle Branch, at North New Salem, Mass.	256
		Sykes Brook at Knightville, Mass.	198

	Page		Page
Tanner Brook near Sunderland, Vt.	256	Wentworth, N.H., Stevens Brook near	30
Tarbell Brook near Winchendon, Mass.	164	West Brimfield, Mass., Quabog River at	195
Taunton River, at State Farm, near		West Canaan, N.H., Mascoma River at	144
Bridgewater, Mass.	85, 379	West Claremont, N.H., Sugar River at	148
tributary near Fall River, Mass.	254	West Deerfield, Mass., Deerfield River near	179
Taunton River basin, crest-stage partial-record stations in	254	West Groton, Mass., Squannacook River near	56
gaging-station records in	84-89	West Hartford, Vt., White River at	142
water-quality analyses, at partial-record station in	379	West Hill Reservoir, Mass., contents of	94
Temperature, collection of data	10	West Hopkinton, N.H., Contoocook River at	42
Temple, N.H., Stony Brook tributary near	52	West Mansfield, Mass., Wading River at	86
Terms, definition of	2-5	West Newbury, Mass., Merrimack River at	294-300
Thames River basin, crest-stage partial-record stations in	255	West River (Blackstone River basin) below West Hill Dam,	
gaging-station records in	114-120	near Uxbridge, Mass.	94
reservoirs in	121	West River (Connecticut River basin), at Jamaica, Vt.	156
water-quality analyses at miscellaneous site in	383, 384, 385	at Newfane, Vt.	157
water-quality stations in	312-322	tributary near Jamaica, Vt.	255
Thermograph, definition of	4	West Springfield, Mass., Connecticut River at	336-337
Thompsonville, Conn., Connecticut River at	204, 353-354	Westfield River at	343-345
Threemile River, at North Dighton, Mass.	88	West Ware, Mass., Swift River at	193
tributary near Oakland, Mass.	254	Westerly, R.I., Pawcatuck River at	113
Tilton, N.H., Winnepesaukee River at	37	Westfield Little River, at outlet of Cobble Mountain Reservoir,	
Time-weighted average, definition of	4	near Westfield, Mass.	202
Tons per day, definition of	5	diversion from	203
Tower Hill Pond, N.H., contents of	67	Westfield, Mass., Westfield Little River near	202
Town Line Brook tributary near Peterborough, N.H.	253	Westfield River near	203
Townshend Reservoir, Vt., contents of	207, 208	Westfield River, at Knightville, Mass.	197
Trout Brook near Holden, Mass.	250	at West Springfield, Mass.	343-345
Tucker Brook, near Milford, N.H.	249	Middle Branch, at Goss Heights, Mass.	199
near Wilton, N.H.	249	near Westfield, Mass.	203, 381
Tufts Branch at Dudley, Mass.	255	West Branch, at Huntington, Mass.	201, 381
Tully Reservoir, Mass., contents of	207, 208	Westport River basin, East Branch, crest-stage partial-record	
Tully River, East Branch, near Athol, Mass.	169	station in	254
Turners Falls, Mass., Connecticut River at	173	low-flow partial-record stations in	252
Union Village Reservoir, Vt., contents of	207, 208	West Branch, gaging-station record in	83
Union Village, Vt., Ompemuncie River at	139	low-flow partial-record station in	252
Unkety Brook near Peppersell, Mass.	251	Westville Lake, Mass., contents of	121
Upper Ammonoosuc River near Groveton, N.H.	127	Wewasantic River basin, low-flow partial-record station in	251
Uxbridge, Mass., West River near	94	Weymouth Back River basin, gaging-station record in	79
Vermont, chemical analyses of ground water in	386, 387	Whetstone Brook tributary near Marlboro, Vt.	256
Vernon, Vt., Connecticut River at	158	White River, at West Hartford, Vt.	12, 142, 380
Victory, Vt., Moose River at	130	Third Branch tributary at Randolph, Vt.	255
Wading River, at West Mansfield, Mass.	86	White River Junction, Vt., Connecticut River at	143
diversion from, above West Mansfield, Mass.	86	Whittaker Brook at Richford, Vt.	257
near Norton, Mass.	87	Wilbur Hollow Brook near Clayville, R.I.	254
Waits River, South Branch tributary near		Wilder, Vt., Connecticut River at	256
Bradford Center, Vt.	255	Willard Brook (Housatonic River basin) near	323-324
tributary near West Topsham, Vt.	255	Sheffield, Mass.	213
Wales Brook tributary near Wales, Mass.	255	Willard Brook (Merrimack River basin) near	
Walker Brook (Connecticut River basin) near		West Townsend, Mass.	250
Becket Center, Mass.	200, 338-342	Williams River, at Brockway Mills, Vt.	150, 380
West Townsend, Mass.	250	Middle Branch tributary at Chester, Vt.	255
Walloomsac River, diversion from, above		Williamstown, Mass., Green River at	220
North Bennington, Vt.	221	Hoosic River below	355-362
near North Bennington, Vt.	221	Hoosic River near	219
Waltham, Mass., Charles River at	76	Wilmington, Mass., Maple Meadow Brook at	69
Ware Brook near Coventry, Vt.	257	Showshen River near	65
Ware River, at Coldbrook, Mass.	12, 186	Wilmington, Vt., Beaver Brook at	174-175
at Gibbs Crossing, Mass.	188	Winchendon, Mass., Millers River near	165
near Barre, Mass.	185	Priest Brook near	166
Ware River basin, diversion from	188	Tarbell Brook near	164
Warner River, at Davisville, N.H.	44	Winchester, Mass., Aberjona River at	72
West Branch, near Bradford, N.H.	43	Windsor Brook tributary at Windsor, Mass.	256
Washington, R.I., South Branch Pawtuxet River at	105	Winnepesaukee River at Tilton, N.H.	37
Waterbury Reservoir near Waterbury, Vt.	235	Winooski River, at Montpelier, Vt.	231
Waterbury, Vt., Little River near	236	near Essex Junction, Vt.	237
Waterbury Reservoir near	235	North Branch, at Wrightsville, Vt.	229
Wausaucum Brook, near Sterling, Mass.	249	tributary near Richmond, Vt.	257
near West Boylston, Mass.	249	tributary No. 2 near Cabot, Vt.	257
Webster, Mass., Browns Brook near	118, 319-322	Winooski River basin, Vt., reservoirs in	230
French River at	119	Witches Brook near Foxenah, N.H.	249
Wabater, N.H., Blackwater River near	45	Wood River, at Hope Valley, R.I.	112
Weirs Beach, N.H., Lake Winnepesaukee at	35	near Arcadia, R.I.	111, 379
Wekapeke Brook near Lancaster, Mass.	249	tributary near Arcadia, R.I.	255
Well number	5	Wood River Junction, R.I., Pawcatuck River at	109
Wellisley, Mass., Charles River at	75	Woodstock, N.H., Pemigewasset River at	29
Wells River at Wells River, Vt.	137	Woonasquatucket River at Centerdale, R.I.	101
Wells River, Vt., Connecticut River at	136	Woonsocket, R.I., Blackstone River at	98
Wells River at	137	Blackstone River tributary at	99
Wendell Depot, Mass., Mass Brook at	171	Worcester, Mass., Kettle Brook at	91
Wentworth Location, N.H., Diamond River near	16	WID, definition of	5
		Wrightsville Detention Reservoir, Vt., contents of	230
		Wrightsville, Vt., North Branch Winooski River at	229
		WSP, definition of	5



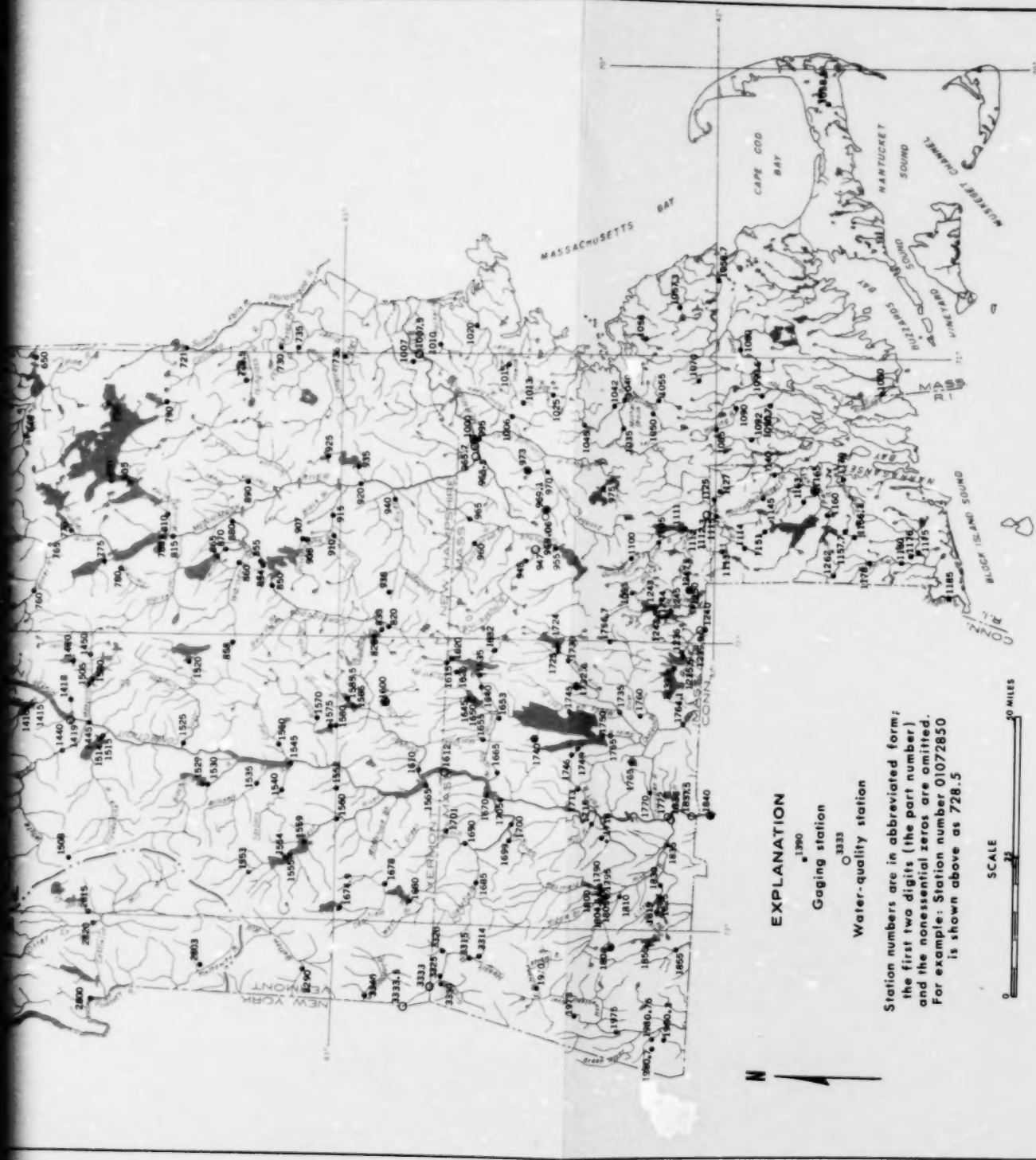


Plate 1. Location of gaging stations and water-quality stations